

# small air forces observer

HANSA BRANDENBURG MONOPLANES  
EARLY TURKISH AIRCRAFT  
ICELANDIC COAST GUARD  
BELGIUM FOKKER D VII  
HUNGARIAN UFAG W-29  
LATIN TROJANS

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# small air forces observer

the newsletter of the Small Air Forces Clearing House

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TBU #58 SAMOLOT MYSLIWSKI SPITFIRE Mk I-V, K. Choloniewski. 20 pages 6 1/2 by 9 1/2 inches, 14 photos, 14 color side views, and one color 4-view drawing. Spitfires in Polish Squadrons. \$3.00

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DECALS (REVELL-BRAZIL): Varig DC-10, Cruzeiro B.727, Varig Super Constellation. \$0.50 each.

POSTER: Aviacao Naval 1979 (16 by 22 inches) 7 color side-view drawings of Brazilian helicopters. \$1.00.

BRIEFLY NOTED: FLIGHT OF EAGLES, Karlovitz & Fenn. An illustrated portrayal of the American volunteer pilots who flew in the Kosciuszko Squadron during the Russo-Polish War of 1920-21. \$11.95 plus 10% for postage and handling. The Kosciuszko Foundation, Book Service, 15 East 65 St., New York, NY 10021. (Editor's note: A must for all SAFCH members interested in things with two wings. Outstanding photographs.)

NZPAF-RNZAF AIRCRAFT COLOUR SCHEMES, MARKINGS AND HISTORIES (Vol. I), Russell. Content: AESL Airtourer, Airspeed Oxford, Auster J/5, Avro 504K, Avro Anson, Bell Sioux, NZAI Airtrainer, Airspeed Consul, Auster C.4 Antarctic, Avro Perfect, BAC Strikemaster, Bleriot. 150 pages including 29 pages of drawings and 70 photos. \$18.00. Squadron Leader J.K. Barry, Officer in Charge RNZAF Museum, RNZAF Base Wigram, Christchurch 4, New Zealand. Cheques made payable to RNZAF MUSEUM.

Handbooks of the Armed Forces: SCANDINAVIA (200 pages) Countries covered are Denmark, Finland, Norway, Sweden, Estonia, Latvia, & Lithuania. Includes maps, orders of battle, and drawings of flags, insignia, tanks, ships, & aircraft. Available from Ron Tarnstrom, Rt.1, Box 2, Lindsborg, KS 67456. (\$5.95 US & \$6.45 others)

SVENSKT SPANINGSFLYG - Swedish Reconnaissance Aircraft, by Emanuelsson, Jarlevik, & Kull (44 pages) A collection of 45 b&w and 7 color photos covering all Swedish reconnaissance aircraft operated by the Swedish Air Force from the time of its founding in 1926. The quality of the photos is excellent, and English translations are provided for all the text and photo

Continued on page 92

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# Belgian Fokker D VII

Belgium received 75 Fokker D VIIIs as war booty (Art. IV of the Armistice Agreement - "In erster Linie alle Apparate DVII ...") 35 of which were in service with Belgium's Aviation Militaire between 1919 and 1930. Nine (including three ex-military aircraft) were flown in civilian colours. All others were cannibalised for spares.

Mr. G. Labrique, a former WWI pilot, remembers that in December 1918, seven pilots went to a depot located at Habay-la-Neuve (in the south-east of Belgium near the Luxemburg border) to collect some D VIIIs and fly them back to Evere-Brussels airfield. Mr. Labrique noted that about a hundred D VII were gathered at Habay-La-Neuve.

(1)

From other sources, it seems more likely that the first deliveries of Fokkers to the Belgium Air Arm occurred in February/March 1919. Most planes were gathered at Evere airfield in a disassembled state and were reassembled by the "groupement technique" of the Aviation Militaire. (2)

## The Military Fokkers

The following squadrons are known to have been equipped with Fokker D VIIIs:

N° 4 Sqd. (zebra insignia). The first D VIIIs were delivered to N° 4 Squadron at Bochum-Krefeld airfield in Germany. This squadron was an observation squadron equipped with Spad XI two seaters. Albatros-built D VII 5149/18 was observed at Bochum in July 1919.

N° 9 Sqd. (ex N° I Squadron) (thistle insignia) from 1919 to 1922. This was a fighter squadron equipped with Hanriot HD Is; the Fokkers were flown as training machines.

N° 10 Sqd. (ex N° 5 squadron) (comet insignia) from 1919 to 1922. The squadron was equipped with Spad VII and XIII and the D VIIIs were used as trainers.

N° 13 Sqd. (holly leaf insignia) from 1919 to 1922. Equipped with Breguet 14, this squadron was also based at Bochum. The Fokkers flew in protection of the two-seatlers.

N° 11 Sqd. (white paper-doll insignia) from 1920 to 1922. This squadron was first created in 1918 as a fighter squadron equipped with Sopwith Camels and Hanriot HD Is. It was disbanded in 1919 and reformed as a bomber squadron with DH 4s as part of Vth "groupe de bombardement" as result of the restructuring of the Belgian Air Arm which was renamed "Aeronautique Militaire Belge" in March 1920. This squadron received 4 Fokkers.

Vith Training Group comprising three training squadrons (penguin insignia) from 1919 to 1930. Asch and Wevelghem schools.

In July 1921, the Aeronautique Militaire was once more reorganized and the number of operational squadrons was increased. As a result, there was a need to increase the number of pilots. All remaining Fokkers of the operational units were, therefore, transferred progressively to the training squadrons at Asch in the province of Limburg near Genck (north east of Liege).

The situation in October 1921 was as follows: Fokkers F1, F2, F3, F13, F25, F26, F28, F29, F30, F31, & F32 were in service at Asch with the Vith Training Group. F4 to F12 were in service with IInd and IIIRD Observation Groups based at Wilrijk near Antwerp and Evere-Brussels. F14 to F19 were in service with the 4th Fighter Group at Schaffen near Diest. F20 to F23 were used by the Vth Bomb Group at Bochum Krefeld.

In December 1921, Fokkers F24, F26, & F27 crashed. In the first months of 1922, nine Fokkers were transferred from operational units to Asch, and five others were scrapped. On 1 August 1922, three new planes were taken out of storage at the VIth Maintenance Group and given the numbers F33 to F35. They went directly to Asch. In April (?) 1922, F3 crashed and in December F32 crashed.

On 25 September 1924, a new training school was opened at Wevelghem (near Courtrai) to replace Asch whose

runways had become inoperable. Of the twenty Fokkers still mentioned at that time as being on the Belgian Air Force lists, about a dozen were reported to have been directly transferred to this new airfield.

In 1928, fifteen aircraft remained on active duty with the training units: F5, F6, F7, F10, F13, F14, F15, F17, F18, F20, F21, F23, F25, F34, F35.

As spare parts became rare and the maintenance more costly, it was decided to replace the D VIIIs with new aircraft. In 1930, the last Fokkers were retired; most of them were scrapped, only three being sold to civilians (OO-AMH, OO-AMI, & OO-AMY),

## Note on the Colours of the Military Fokkers

During 1919 and the beginning of 1920, most Fokkers retained their original German camouflage. The crosses were overpainted on the wings and fuselage with the Belgian cockade. Rudder crosses were replaced by the Belgian tricolour (black forward). All original inscriptions were retained, but on some aircraft these were partially obscured by the squadron insignia. Although all Belgian Fokkers came from German stocks and had been flown in operations during the war (5), German squadron markings were never seen on Belgian aircraft. This seems to be confirmed by photos.

In 1920, the D VIIIs were uniformly repainted in the standard Belgian khaki-green with Belgian cockades in four positions on the wings and black, yellow, and red rudder stripes. Belgian military numbers (F plus number) were painted in black on the yellow stripe and in white on the side of the fuselage.

In 1923, the letter F began to appear on the under-surface of the port lower wing, with the number under the starboard lower wing. These markings were painted in white on the khaki-green background. As always, there were exceptions. Some aircraft were seen with silver or doped linen undersurfaces (F5, F6, F34, for example). Others had their cowling panels left unpainted (F15) or painted black (?).

Squadron insignia were painted on the fuselage in front of the aircraft number. Some aircraft carried wheel-hub decorations; for example, when used as a trainer at Wevelghem F8 had a star. Others had personal markings; for example, when with N° 10 Squadron, pilot Lhermte flew a D VII marked with the ace of spades. Maintenance markings were painted on some of the khaki-green D VIIIs; "lever ici - hier heffen" (lift here) in white at rear of fuselage.

## The Civilian Fokkers

O-BEBE was the first aircraft registered officially by the Administrations de l'Aeronautique (N° 1 certificate). It belonged to Mr. Simonet of Brussels. On 1 October 1923, it was sold to Mr. Cambier (of SABENA), and it was scrapped from the register on 13 November 1923.

O-BILL belonged to the SNETA (Societe Nationale d'Etudes et de Transport - forerunner of SABENA).

O-BISE was registered on 24 May 1920. The owner was Mr. Paul de Liedekerke who sold it to Jean Stampe (of SV4 fame) as O-BABY on 9 May 1923. It was scrapped from the register on 19 November 1923.

O-BOBE was registered on 30 October 1920 by Mr. Lecarte of Gosselies. Sold to Jean Stampe on 30 April 1923, it was declassified on 19 February 1926.

O-BAFA was registered to Mr. F. Regnier on 25 August 1921 and scrapped 15 September 1923. The engine of O-BAFA was a BMW-OPEL of 125 hp.

O-BLUF (Administration de l'Aeronautique certificate N° 63) belonged to Mr. J. Ledure and was registered on 18 August 1921. It was scrapped on 9 February 1924.

OO-AMH was an ex-military aircraft bought by Mr. Armand Bolline and was registered on 22 August 1931.

OO-AMI, also the property of Mr. Bolline, was registered on 5 September 1931. Later sold to Mr. Baudouin.

OO-AMY, bought by Mr. Hemmer of Luxemburg, was registered on 13 September 1931.

In 1934, the three ex-military Fokkers were used in the film L'EQUIPAGE (after the Joseph Kessel novel). During the shooting of this film, on 29 December 1934, OO-AMI crashed and was destroyed. (5)

OO-AMH was sold to Texaco Oil Company and converted to a two seater by SABCA. It was painted all red with the Texaco insignia on the fuselage and on the vertical tail. This aircraft was declassified on 21 October 1937.

OO-AMY became OO-UPP on 25 September 1934. It changed owners often and was finally the victim of an accident near Paris on 6 July 1937. At this date it was scrapped from the Belgian register.

PHOTOS (via author):

1. Fokker DVII 7684/18. Aviation Militaire Belge, Squadron unknown. Boehum Krefeld, Germany.
2. Fokker DVII 6693/18 Alb. F2, No. 9 Squadron, Aviation Militaire Belge, Evere, 1919.
3. Fokker DVII 6681/18 Alb. F17. No. 10 Squadron, Aviation Militaire Belge, Asch 1920. (AELR Brussels)
4. Fokker DVII. No. 10 Squadron, Aviation Militaire Belge. Pilot: "Pitchou" Lang. (M. Terlinden)
5. Fokker DVII. F6, Wevelghem Training School, Aviation Militaire Belge. (Regis Decobek)
6. Fokker DVII. F10, Wevelghem Training School, Aviation Militaire Belge. (Regis Decobek)
7. Fokker DVII. F15, Wevelghem Training School, Aviation Militaire Belge. (Regis Decobek)
8. Fokker DVII. F35, Wevelghem Training School, Aviation Militaire Belge. (Regis Decobek)

(1) AELR magazine, n° 6-7 Spring 1973.

(2) Destrebecq, "Les Fokker D VII en Belgique", Aviation Magazine, n° 644, October 1974.

The tie up between the German serial numbers and the Belgian military numbers or civilian registration of the Fokkers D VII is as follows:

6684/18 Alb.	F?	6679/18	F20
6686/18 Alb.	F?	5149/18	F21
6689/18 Alb.	F?	5443/18	F22
6718/18 Alb.	F?	6670/18	F23
7684/18	F?	6688/18 Alb.	F24
		6683/18 Alb.	F25
6693/18 Alb.	F2	6703/18	F26
5370/18	F11	7620/18	F27
6690/18 Alb.	F12		
7711/18	F14	6162/18	O-BEBE
6687/18 Alb.	F15	7626/18	O-BISE*
6743/18 Alb.	F16	6840/18	O-BOBE
6681/18 Alb.	F17	8447/18	O-BAFA
7707/18	F18	3190/18	O-BLUF
5139/18	F19	2045/18 OAW	? **

\* Later O-BABY.

\*\* Sometimes referred to as O-BABY.

Robert Verhegghen (SAFCH #305), Av. des Croix de Guerre 221 bte 9, 1120 Bruxelles, BELGIUM

-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-

"The Belgium Air Force lost two F-16A on 19 February 1982: FA14 flown by Capt. J.M. Debaix collided with FA35 flown by Lt. Col. Steve Nuyts (former leader of the F-104G "Silvers" team) during air combat tactics at 30,000 ft. FA14 collided coming from beneath and exploded. Capt. Debaix dies on impact. FA35 broke into two parts but Col. Nuyts ejected safely. The aircraft crashed at Wavreilles near Rochefort. This brings the total F-16A losses for the BAF to five aircraft (09, 11, 29, 14, & 35). All from 1 Wing at Beauvechain.

"No. 349 and 350 Squadrons of 1 Wing are now fully operational on F-16A and have begun to paint squadron insignia on the fins of their aircraft (red band with yellow head for 350, and blue band with blue 'goedendag' (weapon) for 349.

"The first F-16A were received by the 10 Jachtbomber Wing at Kleine Brogel in December 1981, and now have Wing badges painted on their fin (red lion on blue shield).

"Belgian Mirage VBA and BR are getting a wraparound camouflage. Already seen at Florennes Air Base were BA04 and BA11 of No. 2 Sqn. and BR04 of No. 42 Sqn. Colours are standard 'Vietnam' colours (24073, 24002, & 24219). Almost all BAF Mirage V have been retrofitted with Loral Rapport 2 ECM equipment (no ECM on two seaters)."

Robert Verhegghen (SAFCH #305), Av. des Croix de Guerre 221 bte 9, 1120 Bruxelles, BELGIUM

"In the book 'The Illustrated History of Air Forces in World War 1 & 2' by Chris Chant, on page 116 there is a photo identified as an aircraft of the Chinese White Army in 1927. It looks like a Caudron C.59, and it has an interesting dark/light/dark roundel behind the rear cockpit. If anyone can identify the colors, I would be grateful to hear from them."

Paul Mears (SAFCH #270), "Homestead", Southampton Rd., Dibden, North Southampton, SO4 5TE ENGLAND

"I really enjoy your publication and was overwhelmed with responses to my request for info on the Boeing 307. I am amazed with the amount of information that is squirreled away in peoples personal files."

Gary Curtin (SAFCH #521), 6122 Pueblo Ct., Burke, VA 22015

"I have two color photos of Mozambic Air Force aircraft: (1) An overall silver-grey MiG-17 numbered #21 with a tail insignia consisting of a black roundel with an upright red triangle bearing, in gold, the simplified coat of arms found on the Army red flag. (2) A closeup of an unidentified aircraft with a light olive drab finish and the same insignia as above.

"Prime Minister Ptolemy Reid's Office in Georgetown, Guyana, writes that the Guyana Defence Force Air Command aircraft are no longer carrying national insignia. Instead, they bear the Guyanese civil prefix 8R-. Sea units bear a green regimental jack."

Creighton Kern (SAFCH #541), 25 S. Monroe St., Ridgewood, NJ 07450

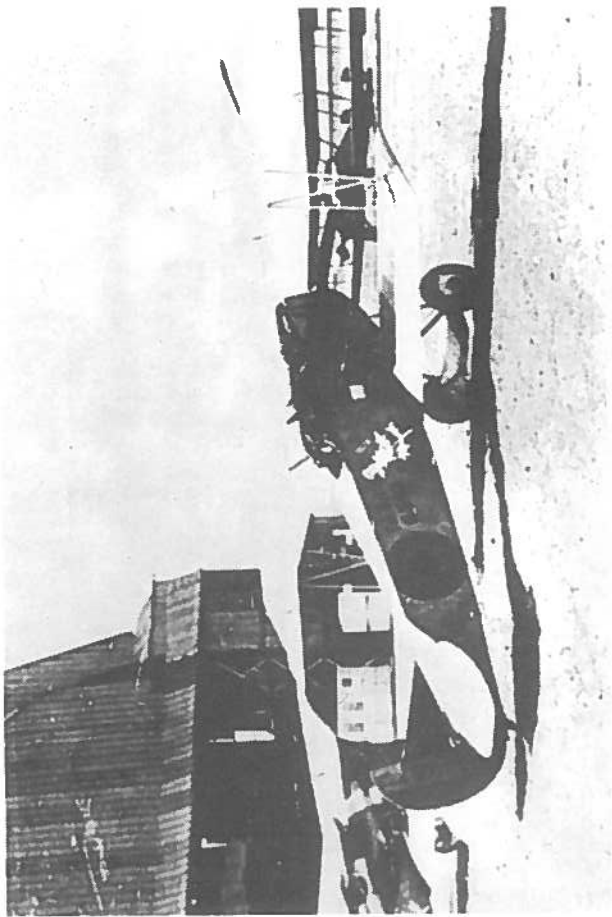
"In response to Creighton Kern's letter, I can answer two of his questions. As for Iran the only change is from IIAF (Iranian Imperial Air Force) to IRIAF (Islamic Republic of Iran Air Force). The same applies to the army aviation, from IIAA to IRIAA. The rest of the markings and camouflage are the same as before the revolution. My evidence is two AP LaserPhotos, one of an Augusta AB205 burning after being shot down at Abadan by the Iraqis last year. The second LaserPhoto is of a McDonnell F-4 Phantom destroyed by an Iraqi air attack on Tehran's airport. I've also seen footage of a flight line of Iranian Tomcats at Shiraz during the Iranian-Iraqi War.

"As for the answer to his question on Malta, the symbol is a roundel in national colours with a 'TF' superimposed. The 'TF' stands for Task Force which denotes certain units of the armed forces which operate under separate command. Aircraft of the Helicopter Flight carry this marking along with civil registration.

Tor Scott (SAFCH #403), 168 59th Ave., Chomedey, Laval PQ, CANADA H7V 2B8.

"My Czech pen-pal has asked for information on the camouflage schemes and markings for Ugandan & Salvadorean Magisters and Indonesian T-34A Mentors. I've been unable to track down anything. I'd also like to buy a copy of the English-language edition of 'Romanian Aircraft Construction'."

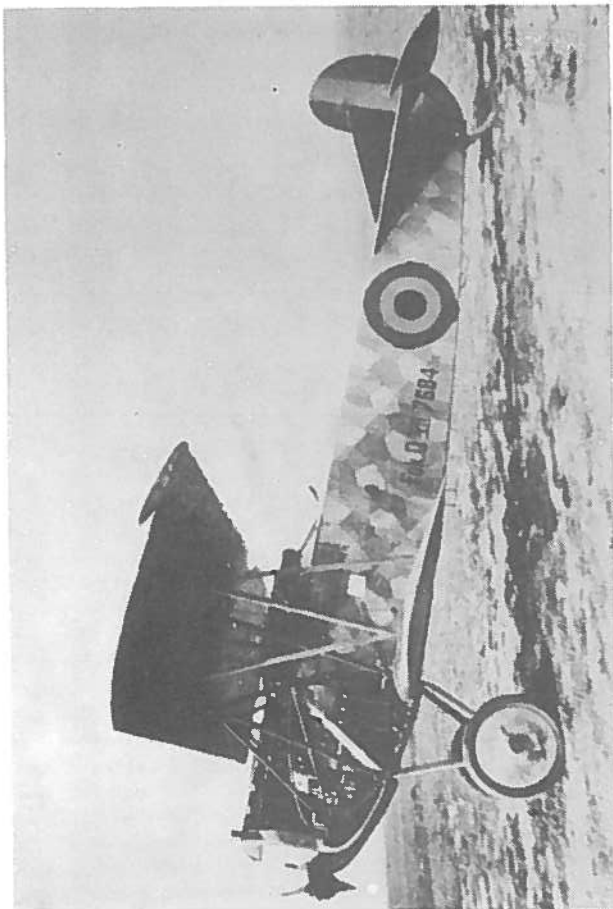
Graham Boak (SAFCH #460), 2 Mitton Crescent, Kirkham, Preston, PR4 2AZ, ENGLAND.



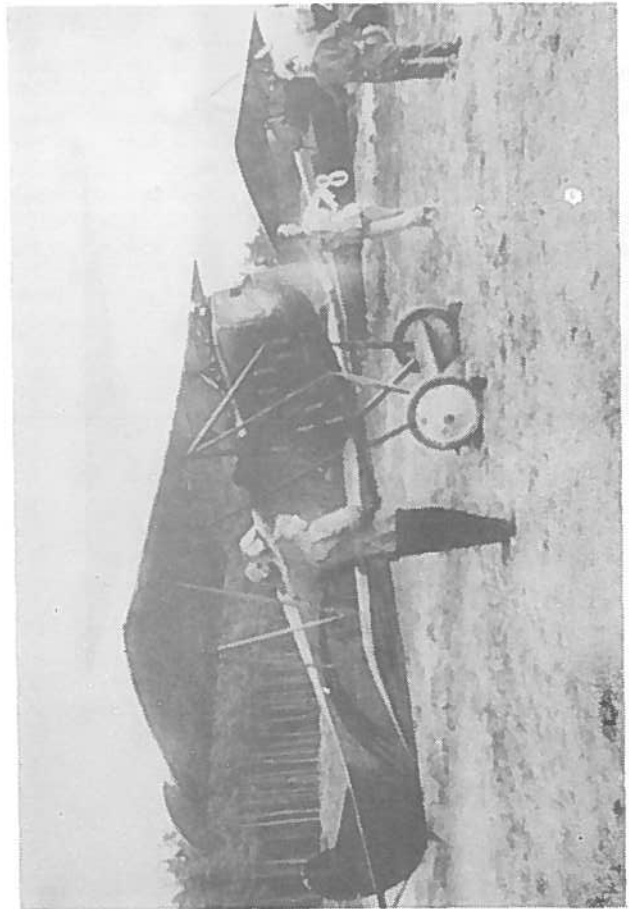
2



4



1






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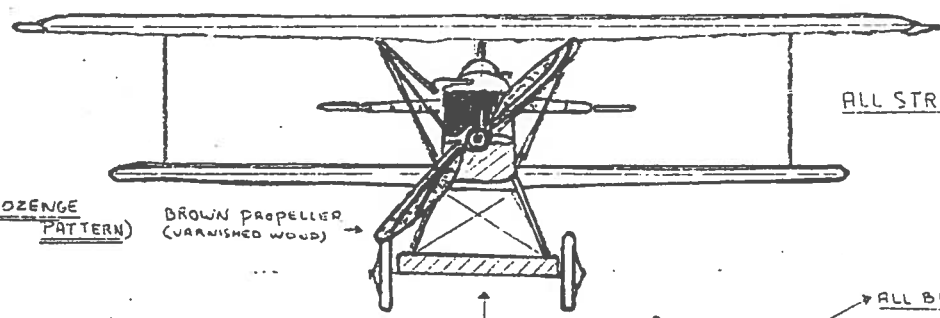




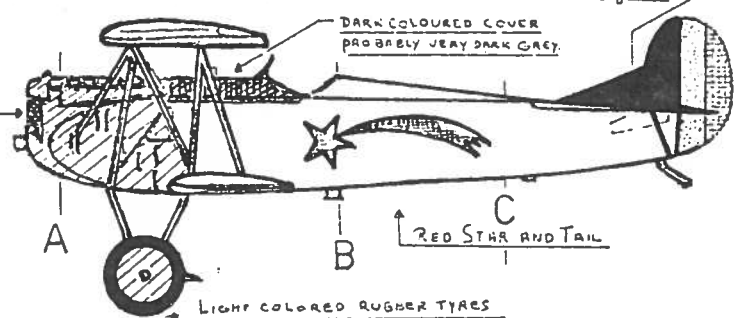
color key

(NOT FOR THE LOZENGE PATTERN)

-  red
-  yellow
-  olive green
-  black
-  clear doped linen (fuselage)



ALL STRUTS OLIVE GREEN



A

B

C

LIGHT COLORED RUBBER TYRES

Olive green.

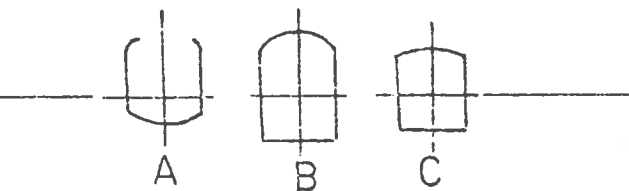
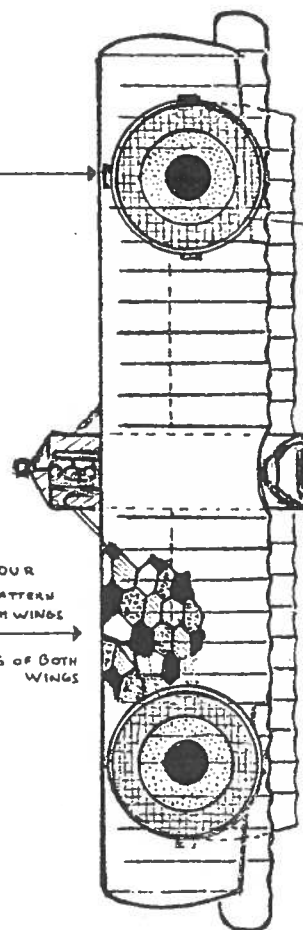
ALL BLACK FIN

DARK COLOURED COVER  
PROBABLY VERY DARK GRAY.

no serial on  
this aircraft

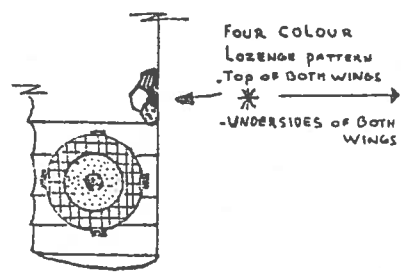
RED STAR AND TAIL

BELGIAN COCKADES SURIMPOSED  
OVER GERMAN CROSSES



WHITE SURROUND ON TOP ONLY.

LOZENGE PATTERN \*



FOUR COLOUR  
LOZENGE PATTERN  
TOP OF BOTH WINGS  
\*  
UNDERSIDES OF BOTH  
WINGS

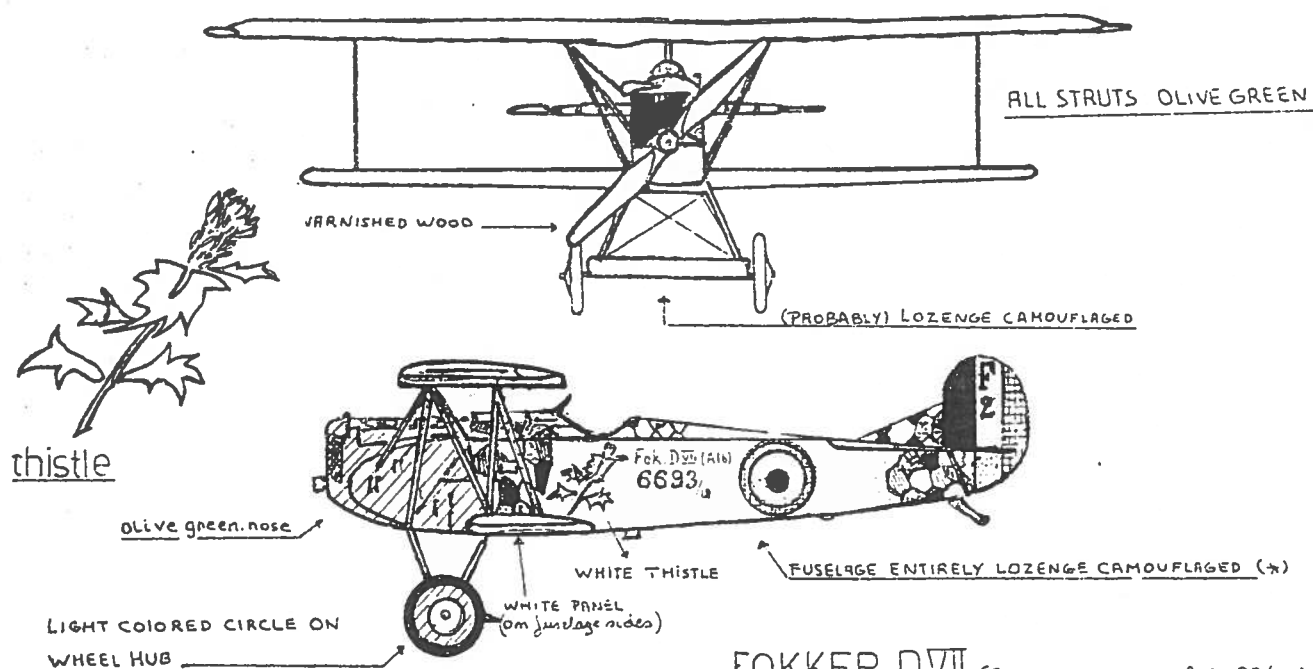
NOTE: NO MACHINE GUNS ON THIS AIRCRAFT

FOKKER D.VII

aeronautique militaire belge  
n° 10 squadron

Verheugden R. IPMS-BS

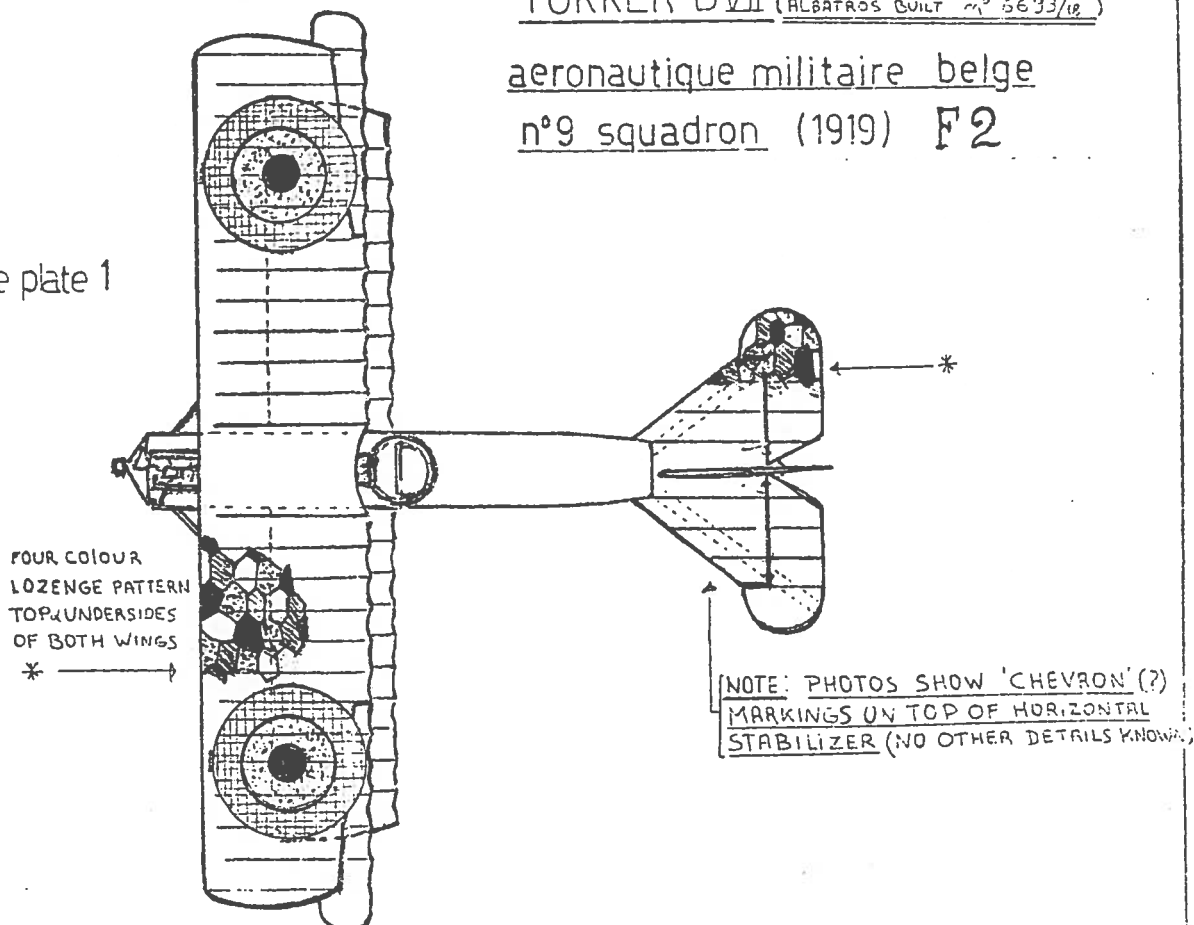
\* use Micad SCALE SHEET n° 72-43A (UPPER SURFACES)  
" " " n° 72-43B (UNDER SURFACES)



FOKKER D.VII (ALBATROS BUILT n° 6693/18)

aeronautique militaire belge  
n°9 squadron (1919) F2

color key: see plate 1



\* USE MICRO SCALE DECAL SHEET n° 72-43A (TOP) AND n° 72-43B (UNDERSIDES)

Verhegghen R. IPMS-BS



RED FRAME ON PLANE N° 10

VARNISHED WOOD PROPELLER

CONVERS	CONVERS
CONVERS	CONVERS

ROSTER (FUEL, OIL...)  
WHITE ON CAMOUFLAGE  
BACKGROUND-PORT ONLY

### NATURAL METAL NOSE

LIGHT COLOURED COVER  
PROBABLY FLY DOPPE

WHITE IS

white arrow  
LEVER 141  
HIGH MOFFEN  
(white)

WHITE FIS



FWD →



body: dark blue & white

Eye : white


Feet & beak: orange.

 black

 yellow

 red

khaki-green

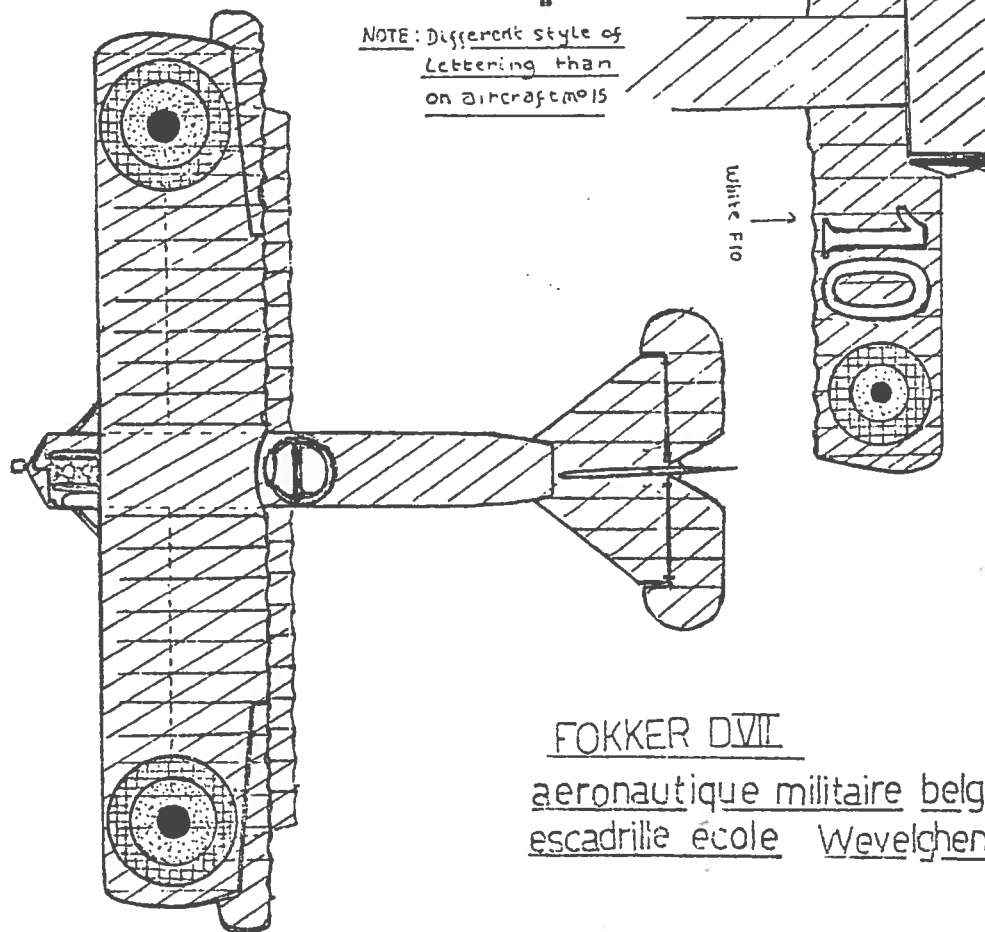
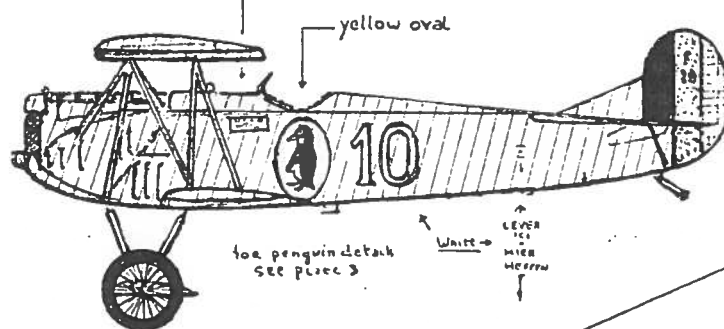
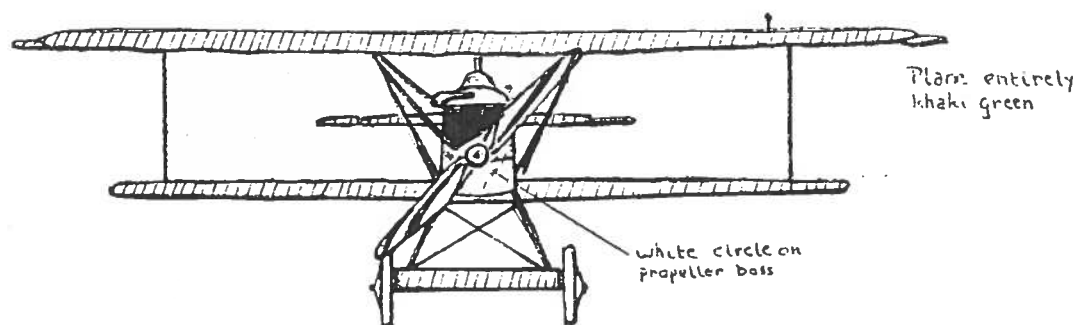
 unpainted metal

FOKKER D.VII (ALBATROS BUILT NO 6537/12)

aéronautique militaire belge  
escadrille école (1920-1930)  
Asch & Wevelghem

Verkeggen R IPMS-BS

FOR ROSTER DETAIL  
SEE PLATE 3.  
NOTE: RED FRAME ON  
THIS PLANE



FOKKER D.VII  
aeronautique militaire belge  
escadrille école Wevelgem

Color key: see plate 3

Verheggen R. IPMS/BS

#### AUSTRALIA

APMA (Australian Plastic Modeller's Association, PO Box 51, Strathfield, N.S.W. 2135)

Nothing received since Sept. '81.

#### AUSTRIA

OFH NACHRICHTEN (Oesterreichische Flugzug Historiker, Kannwegasse 1/15, A-1150, Wien)

4/81 (24 pages) "Osterreich's Letzter 'Bestmann'" 5 pages including one photo and a one-page 1/50-scale drawing. "Ercoupe in Osterreich" 6 pages including 2 photos and a one-page scale drawing. "K.u.k. Seeflugzeug Type L (L 135M)" a 2-page 1/72-scale drawing. One page 1/72-scale drawing of Saab 91 Safir 3F-SF. Photo: Fiat A 120 A-102.

"WKF: Wiener Karosserie Flugzeugfabrik, Dr. Wilhelm von Gutmann 1914-19", Schroder. (24 pages) A special OFH publication on the aircraft built by WKF during WW I. Scale drawings of the WKF Lloyd CII 42.52, WKF Berg CI 83.12, WKF DRI 80.05, and WKF Berg DI 84.08 & 284.05. Photos of Lloyd CIII, CV, WKF prototype 80.06, and DRI 80.05.

PANORAMA (IPMS/AUSTRIA, Nordmannngasse 11-13/4/6, A-1210 Wien)

6/80 (36 pages) "Sikorsky S-61A1 Royal Danish Airforce" 3 pages including one photo and 2 pages of drawings.

2/81 (36 pages) "Die Jets des Artem Iwanowitsch Mikojan, Teil 1 Die MiG-9" 5 pages including 6 photos and 3 pages of drawings. "Alouette III im Detail" 8 pages including 13 photos 5 pages of drawings of details. "SAAB 91 Safir" one page of 4 photos (Austrian markings).

3/81 (36 pages) Nothing of small air force interest, but a beautiful 14 page article on Vienna fire trucks.

4/81 (36 pages) "Heinkel He 112" 6 pages including one photo and 4 pages of drawings (Rumanian, Hungarian, and Spanish aircraft). "SAAB Safir im Focus" 5 pages of 18 photos of details of Austrian machines.

#### BELGIUM

KIT (IPMS Belgium, Rue des Eburons 35, 1040 Bruxelles; 4 issues for 400 Belgian franks.)

44 (30 pages) "G.S.E. Belges" 11 photos of ground support equipment. "Mirage 5BA Close Up Drawings" 2 pages. "New Underside Camouflage Scheme for Belgian Air Force Mirages" one page. "Harvard Belge" 2 pages of 1/72 scale drawings and 4 photos of of a Belgian Harvard at the Advanced Flying School at Kamina 1956.

#### BRAZIL

SOUTH AMERICAN AVIATION NEWS (Caixa Postal 5216, 09720 Rudge Ramos, Sao Paulo; 6 issues for \$7.00; back issues US \$2.00 each.)

Nothing received since #31.

#### CANADA

HIGH FLIGHT (Box 393, Stittsville, Ontario K0A 3G0; 6 issues for CAN \$15)

Nothing received since Vol. 2, No. 1.

RANDOM THOUGHTS (IPMS CANADA, Box 626, Stn. B, Ottawa, Ontario K1P 5R7; 6 issues for \$12.00 in US, \$13.00 others)

4 81 (24 pages) "Canadair CL 215" 17 pages including 2 pages of side-view drawings (reprinted from SAM), 2 photos of a/c in action, and 37 photos of details.

#### ENGLAND

MAGAZINE (IPMS ENGLAND, Flat 4, 18 Delancey St., London NW1 7NH; 6 issues for US \$20.00)

Nov/Dec 81 (32 pages) "SAAB 35 Draken - Part I" 8 pages including 8 photos and 4 pages of 1/72-scale 3-view drawings (J35A,B, Sk35C, J35D, & S35E). "A Scarlet Starfighter" 2 pages of drawings and 2 photos of Canadian CF-104 in an attractive red and white color scheme. "RAF Sabres" 5 pages including 15 photos and 6

side-view drawings. Photos: Italian C-130H 46-09 and Luftwaffe VFW-614 17+01.

MILITARY AVIATION REVIEW (East Cliff, Stotfield Rd., Lossiemouth, Moray IV31 6QT, Scotland; 6 issues for £10.20)

10/11 81 (48 pages) "The CAF Revisited" 6 pages including 9 photos. "Marineflieger Serials 1958-1968" one page. "French Air Force - Photo Feature" P-47D (3), B-26G Marauder, T-6G, P-51B, P-38L, F8F-1, RB-26C (3) & B-26C Invaders, F-84E (2), and S-55 (2). Photos: Norwegian F-16A 290, Italian SIAI 208M & U-10A Helio Courier, Moroccan C-130H, Irish Puma 242, and Norwegian Lynx 228.

#### FINLAND

MALLARI (IPMS FINLAND, PL 798, SF-00101 Helsinki 10) Nothing received since #37.

#### FRANCE

LA VITRINE DU MAQUETTISTE (IPMS FRANCE, 3 rue de l'Amiral Roussin 75015 Paris; 4 issues 45FF surface, 60FF air; back issues 12FF; "La Lettre de l'IPMS" 25FF.)

#8 (44 pages) "Republic P-47D Thunderbolt" 7 pages including 5 photos of French machines and 11 photos of details. "Des Ouragan de Toutes les Couleurs" 11 pages including 19 photos and 3 pages of color profiles (all French machines). "Les Avions Republicains de la Guerre d'Espagne" 6 pages including 13 photos.

#9 (40 pages) "Un Oiseau Rare: Le Chasseur Suedois FVVS J22 1942/1952" 5 pages 4 photos and 2 pages of 1/72-scale drawings. "Siko H.34 a la Francaise" 6 pages including 7 photos, one page of drawings of details, and two pages of color side-view drawings. "Une Journee a la 33e Escadre de Reconnaissance (BA 124)" 6 pages including 14 photos and two pages of drawings of French Mirages and their details.

#10 (40 pages) "Un Elegant des Annees 50 le Republic F-84G" 8 pages including 12 photos and 5 drawing of details of French machines. "Le Potez 53" 9 pages including 11 photos, drawings of details, and both 1/48-scale and 1/72-scale drawings. "Le F.1" 10 pages including 18 photos and 3 pages of drawings of French Mirage F.1 and their details. "Avion en Indo" one page of 3 photos (MS 500, Spitfire IX, C-47).

#11 (40 pages) "L'Aquilon" 10 pages including 15 photos, drawings of details, and 1/72-scale drawings. "Le F.1" 10 pages including 13 photos of French machines and 4 pages of color drawings of insignia and stenciling.

#12 (40 pages) "Le Stampe" 15 pages including 26 photos, many drawings of details, 2 color pages of drawings of French civil machines, and 1/50-scale and 1/72-scale drawings. "Un Fougasson de la 33" 3 pages including 6 photos.

#### GERMANY

MITTEILUNGEN (IPMS GERMANY, Oertzenweg 12b, 1000 Berlin 37; DM 42.00 Europe, DM 49.00 USA, DM 55.00 Japan, DM 61.00 Australia)

2-82 (30 pages) "Kondor DII" one page with scale three-view drawing.

#### ITALY

IL NOTIZIARIO (IPMS ITALY, CP 182, 41100 Modena Ferrovio)

Nothing received since 3/4 '80.

JP-4 (CP 1550, 50100 Firenze)

10 81 (88 pages) Photos: Turkish F-104G 785 and F-4E 1-301 & 1-299 (color), Italian T-33 36-69, Egyptian CH-47C (color), Swiss Twin Bonanza A-711, Jordan F-5E (color), Canadian CP-140 110 (color), and Chilean F.8L Falco. "La Famiglia dei Sukhoi Fitter" 4 pages with side-view drawings. "Programma F-16" 12 pages including photos of Dutch J-231 & J-262, Belgian, and Israeli 138 (color).

11 81 (88 pages) Photos: Somalia AB-212 60221; Burundi

SF.260 9U-ZRB; Japan P-3C (color). "Aeroplani Tedeschi in Russia" 4 pages including photos of Albatros B.II, LVG CVI, Halberstadt CLII, Fokkers DVII, Junkers F.13, G-1, Dornier Wal, Heinkel HD 55; color side-view drawings of Fokker DVII & Heinkel He 51.

#### NEW ZEALAND

SCALE DIMENSIONS (IPMS NEW ZEALAND, 72 Walworth Ave., Pakuranga, Auckland)

Nothing received since April '81.

#### NORWAY

LIMTUBEN (IPMS NORWAY, c/o K. Haugen-Nes, Postboks 273, 2050 Jessheim, NORWAY; 4 issues for \$9.00.)

Nothing received since 1 '81.

#### SOUTH AFRICA

AFRICAN AIR REVIEW (AVIATION SOCIETY OF AFRICA, PO Box 1413, Alberton 1450; 6 issues for R11-00)

9/10 81 (20 pages) Nothing of SAFCH interest.

#### SWITZERLAND

VIRUS PLATICUS (IPMS SWITZERLAND, Olivenstr. 2, 9320, Arborn; 4 issues for Sfr 24)

4/81 (30 pages) "De Havilland DH-112 Venon" 6 pages including 5 photos and 2 pages of 1/72-scale drawings of Swiss machines.

#### USA

DIRTY PLASTIC (IPMS PHOENIX, 509 W. Camino Dr., Phoenix, AZ 85021; 4 issues for \$6.00.)

Nothing received since Winter 81/82.

AIR SONIC: (Balmes, 86-Entlo.2.a, Barcelona-8, Spain. 12 issues 1800 ptas. surface mail.) Text in Spanish with English photo captions.

No. 1 8/80. Spanish Phantom. 25th Anniversary C-130; photos USCG, RAF, Argentina, Spain (page 6-80). Portuguese Sabres (page 9-10). AB-212ASW Italian Naval Service; photos SH-34J, AB47G (page 11-13). Spanish Military Seaplanes (page 14-18). Spanish Mirage III Unit; color & unit badges (page 22-27). CASA F-5B; photos and review of Hasagawa kit (page 36-39). Photos: CASA C-212, CASA C-101, FAE DC-8-52, Italian CH-47C.

No. 2 9/80. Spanish F-104. RAAF in Vietnam; poor quality photos (page 4-7). F-104 in Spanish Service; 11 photos, serial numbers, and bases (page 12-17). F-5 in Swiss Service; 7 photos (page 18-21). MACOM 2; photos of KC-97L, F.1 Mirage, F-4; unit badges 14 & 121 Sqd. (page 25-31). Iberia Airlines; 8 photos & serial numbers. T-6D; photos and review of Mongram kit (page 40-43). Photos: Spanish F.1 Mirage & Canadair CL-215.

No. 3 11/80. Marina AH-1G Cobra. Spanish Aviation History; photos, text, & color unit badges (page 4-13). Military Aviation in Paraguay; photos of EMB-326GB, Cessna 337RG, Cessna U-206 (Navy), C-131D, C-47, DHC-6, Cessna 402, PBV-5A, & DC-6 (page 14-18). Aviation in Mauritania; photos of B.N. Defender and a/c types and serial numbers (page 23). Bell AH-1 Cobra; photos IAAF & Spanish Navy; drawings AH-1S & AH-1T (page 24-30). SM S-55 in Spain; 4 photos (page 31-34). Portuguese Aviation; 7 photos (page 38-41).

No. 4 12/80. Spanish Mirage III. E-17 Mentor in Spain; 3 photos and serials (page 8-10). Spanish Aviation History; as in No. 3 (page 11-17). Fairchild 91 in Spain; (page 19-22). Mirage IIIEE of 11 Sqd.; 10 photos (page 23-27). Ju-52 in Swiss AF; (page 34-35). Photos: Spanish RF-5 in camouflage.

No. 5 1/81. Spanish F-5A. Spanish Aviation History; as in No. 3 (page 4-11). Spanish Aviation in the Canaries; photos of Ju-52 & T-6 (page 16-19). Japanese Phantoms; 6 photos with tail markings (page 23-26). Vietnam Air Force 1951-1975; photos of UH-1D, C-119G, A-37A, AC-47D, A-1H, and listing of types, bases & units. Aero-tec A-122; photos and drawings of a/c with air forces of Brazil, Bolivia, and Paraguay (page 35-38). Photos: Angolan F-27.

No. 6 2/81. Spanish C-47. Spanish Aviation in the Canaries; (page 17-21). F-16 in Holland; 7 photos (page

23-27). 37th Transport Wing, Spanish AF (page 28-33). DC-3/C-47 in Spain; photos, c/n & s/n (page 34-38). Photos: Spanish MBB-105 & AB-205.

No. 7 4/81. Spanish T-38. Spanish Aviation History; as in No. 3 (page 6-12). Spanish Macchi M.41; 3 photos and drawing (page 14-16). Portuguese Aviation; photos T-38, F-84G, B-26C, RT-33A, P2V-5, 707-3F5C, G-91R/4, SA-330C, & C-47 (page 17-22). Talavera: Pilot Combat Squadron; photos T-33, T-38, Sabre (page 25-29). Spanish Navy; good photos of AV-8A, Hughes 500(ASW), A/Bell 212(ASW), SH-3D (page 35-39). Photos: IIAF F-14, Finnish HS Hawk.

No. 8 7/81. CASA E-25. The Pedros in Spain; photos of He-111 and unit badges (page 6-12). Irish Army Air Corps; photos of HS-125, SF-260, Magister, Provost, Vampire, Cessna FR-172, Alouette III, Beech King Air (page 23-27). The Academy General Aviation; photos of CASA E-25, Bu 131, Aviocar, Mentor, A-10x3, Zlin 2, CASA TE.12B, T-6D, F-33C Bonanza, C-47, AISA-1-115, plus unit badges, serials, and c/n (page 29-37). Argentine Naval Aviation 1937; very good photos of Fairey IIIF, Boeing Stearman, Douglas Dolphin, P2Y-3A, Consolidated M17, Vought V-142A, Vought O2U-1A, and squadron history (page 38-41). Spanish F-104G; photos and review of ESCI kit (page 42-45). Photos: Spanish Mirage F.1BE & AISA 6N Autogiro.

Compiled by Colin Burgess (SAFCH #402), 2 Conway Street, Crystal Park, Benoni 1500, SOUTH AFRICA.

#### AIR INTERNATIONAL

Canada: "Cold lake Hots Up", Vol. 21, No. 2. "Diverse but Unified - CAF in Western Canada", Vol. 21, No. 3.

France: "The New Atlantic Emerges", Vol. 21, No. 3.

Greece: "Hellenic Air Power - A Continuing NATO Asset?", Vol. 21, No. 3.

Italy: "AMX-Italo-Brazilian Bantam Battler", Vol. 21, No. 2.

Mexico: "From Cavalry to Close Support", Vol. 21, No. 5.

Switzerland: "Pilatus PC-7: Switzerland's Turbo Trainer", Vol. 21, No. 3.

Compiled by Tor Scott (SAFCH #403), 168 58th Ave., Chomede, Laval PQ, CANADA H7V 2B8.

#### DE VLIEGENDE HOLLANDER

Jul/Aug 81: Nothing of saf interest, although the full page of "Columbia" in color is great!

Sep 81: Color photos of F-27 C-10 with smoke trail, Grasshoppers' Alouette III, S-11 E-36. B&W photos of Dutch C-47 ZU-10, Fokker D-XXI 219 (ex Harvard), Angolan AF F-27 PH-FTU, Meteor 3W-55.

Oct 81: Color photos NF-5A K-3019 in Dutch national color scheme and NF-5A K-3001 of the 'Testgroep'.

Nov 81: A full page color photo of an Jordanian F-5E 1161.

Dec 81: Color photos of Dutch Spitfire H-15 on display, Finnish AF F-27 FF-1, Dutch Navy P-3C 300. B&W photo of Dutch Navy's Neptune 201 on its way to Soesterburg Museum.

#### BRITISH AVIATION REVIEW (including ROUNDEL)

Jul 81: A complete review of the SAAF. ROUNDEL's series on RAF serials covers WE625 to WG267 - many saf aircraft listed.

Aug 81: B&W photo of Moroccan F-5E 91939.

Sep 81: B&W photos of Turkish F-4E 70295/1-295, Greek TA-7H 161220, and Greek Mirage F1 114. As all issues of BAR, this issue contains much information of saf concern.

Oct 81: B&W photo of Portuguese T-33 1952 on display (ex RCAF 21228). A 2-page report of a/c (mainly Latin American) in the Miami area.

Nov 81: ROUNDEL has reached WJ221 to WL874.

Compiled by Ben Marselis (SAFCH #143), PO Box 5065, 2701 GB, Zoetermeer, THE NETHERLANDS.

# Icelandic Coast Guard

December 29th, 1975 marked the 20th anniversary of the Icelandic Coast Guard's Division of Air Operations. On that date in 1955, Catalina flying boat TF-RAM performed the first fisheries patrol flight undertaken by the Coast Guard's own aircraft.

At that point, the concept of air patrols of Iceland's fisheries jurisdiction was already 35 years old, first being mentioned in a newspaper article in 1920 by Frank Frederickson, the Canadian-Icelandic pilot of the first aircraft to fly in Iceland. At one point in the article, Fredrickson stated "flying boats could well be used for defensive patrol of Iceland's coastal areas, and to inspect fisheries, protecting them from foreign fishing boats".

At that youthful stage in Icelandic flying, nothing was done, but the idea lived on, and when air operations were reintroduced to Iceland, eight years later, it was common for Coast Guard personnel to accompany aircraft searching for herring off the north coast. This continued off and on until the war began, but was discontinued until herring search flights were resumed after the war. Regular air patrols did not begin until Iceland's 1952 declaration of a four-mile fishing limit on straight base-lines, and were carried out with leased passenger aircraft.

The Convair PBV-6A Catalina purchased by the Coast Guard in December 1955, had been purchased and salvaged by the Icelandic Civil Aviation Authority. It had been Navy BuNo 46651 and belonged to FASRON 107. It had run aground on the northeast coast. Temporary repairs were made on the spot and the aircraft was flown to Reykjavik, registered TF-FSD (all civil Aviation Authority aircraft are registered TF-FSx, taken from the Icelandic name of the Authority, FlugmalaStjorn), and then flown to Copenhagen, Denmark, for complete rework. Re-registered by the Coast Guard as TF-RAN, the Catalina served well until 1962, when it was retired. In its career with the Icelandic Coast Guard, the Catalina had flown an estimated 350,000 nautical miles in fisheries patrols, rescue searches, ambulance flights, and geographical and ice surveys. It had assisted in the arrest of 14 trawlers, one of which, the Cape Cleveland, was captured and escorted into port single-handedly on 16 December 1956.

The Catalina's replacement, TF-SIF, was a Douglas DC-4 Skymaster which arrived in Iceland on 15 August 1962. It had been purchased from Transportes Aereos de India Portuguesa (original registration CR-IAF), and received new radar and communications equipment before beginning operations. An APS-33 radar was installed beneath the nose in a Fairey Gannet radome, additional observation windows provided, and other minor changes introduced. An American-made carbon arc spotlight was placed below the left wing. TF-SIF did not share the colorful service life of the Catalina, primarily because no contested fisheries extensions occurred during her operational career, but she carried out her duties in a satisfactory manner until sold to an American purchaser in October 1971. One part of the Coast Guard's mission which received considerable emphasis this time was the sea ice survey, and SIF played an important role in guarding the sealanes against the ghostly peril of unexpected ice.

When a successor to the Skymaster was being sought, it appeared likely that the Grumman Albatros (HU-16) could fill the bill. Accordingly, two were acquired as surplus from the US Navy, BuNos 141276 and 142361, arriving for tests in January of 1969. In practice, the "Albatri" proved too clumsy and insufficiently versatile for their intended role, and were returned after a few months. They remained parked at the Keflavik NATO base until spring of 1970, when they were flown to the United States. Reports are that one of the aircraft wound up playing "ramp queen" at every refueling stop on the way to Norfolk, not strange, considering that their condition

even on initial arrival in Iceland, was in kindest terms "poor".

After lengthy consideration, the Fokker F-27 Friendship, long in satisfactory internal service with Icelandic air, was selected as the new Coast Guard patrol plane, and an F-27 purchased from Air Nippon Airways (JA-8634) arrived in the 12th of May, 1972. This aircraft, registered TF-SYR, though thought a poor choice by some critics, has served so satisfactorily, that a second aircraft was obtained. Fokker F-27-200 (sn 10545) arrived on 29 December 1976, and was registered TF-SYN. In 1980, TF-SYR was sold to Icelandic Airways.

SYR's success has created a new market for the Friendship, Fokker drawing on the Icelandic experience to create a long-range fisheries patrol version specifically for small countries with large fisheries jurisdictions. (The solution to the range problem with TF-SYR had made it probably the only Fokker Friendship in the world equipped with external wing tanks. Early British news reports from the 1972 "Cod War" solemnly describing them as "bombs".)

The story of the Icelandic Coast Guard's air operations cannot be concluded without a "Chopper Chapter". The helicopter's versatility has brought the Coast Guard into many unusual jobs, from construction to sheepherding. The ICG's first helicopter was a Bell 47J (factory no. 3305), which was registered in April 1965 as TF-EIR. It was destroyed in a forced landing in the interior while doing a power-line survey for the Government Power Authority.

As a replacement, two Bell 47G helicopters from the US Army (63-13673 and 64-15426) were acquired and registered TF-HUG and TF-MUN. TF-HUG was damaged in an emergency landing aboard the Coast Guard cutter Aegir in May 1974, and MUN was forced down on the southwest coast in December of that year.

The first and only large helicopter in ICG service was TF-GNA, a Sikorsky HH-52A acquired from the US Coast Guard (USCG 1411) in July 1972. Tail rotor gearbox failure brought it down without loss of life at Skalahell in October 1975. There has been no official word on a replacement for this aircraft, but in the meantime, the HH-3E's of the US-manned Iceland Defense Force at the Keflavik NATO base will carry out the search and rescue role.

On 7 April 1976, the Icelandic Coast Guard received a new Hughes 369 helicopter (sn 10507735). It was registered TF-GRO. In 1981, it crashed at Burfell and was destroyed. In 1980, the Coast Guard ordered a Sikorsky S-76A. It arrived on 4 October 1980 and is registered TF-RAN.

(Editor's note: This article is reprinted with the kind permission of IPMS-ICELAND. It first appeared in the 1976 edition of their magazine ISMO and material updating this article for the SAFO was supplied by IPMS-ICELAND member Mikael Olafsson. Copies of the 1976 ISMO are available at \$5.00 from IPMS-ICELAND, c/o Alfred Bodvars-son, PO Box 386, 121 Reykjavik, ICELAND.)

Note on Icelandic Registration for the Uninitiated.

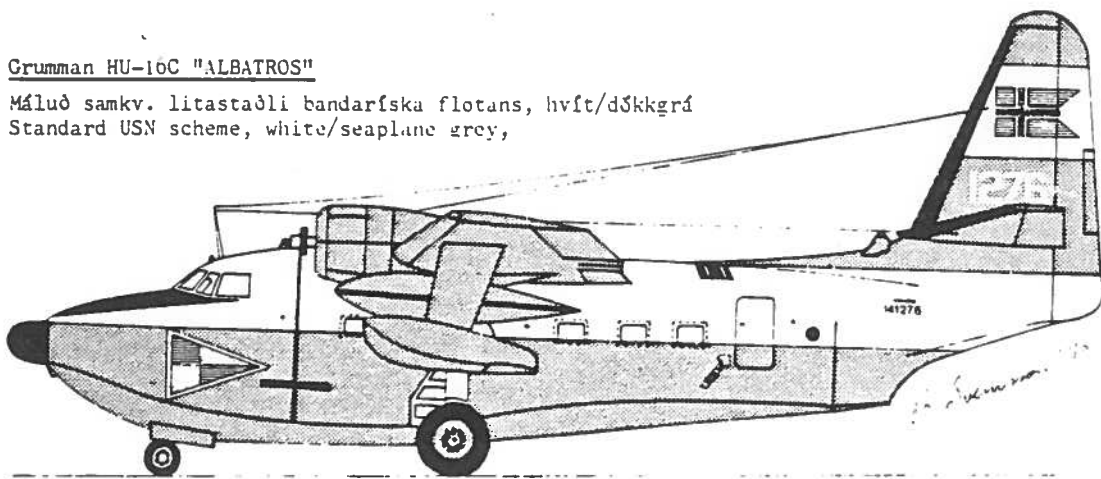
Icelandic airplanes are funny. It is, perhaps, to be expected in a country long concerned with literature and language - and is made possible by the practice, in Icelandic Aviation Registry, of allowing owners to request letter combinations of their own choosing.

As an example, we might consider the Icelandic Coast Guard. All fixed wing aircraft (except the Grumman's, which never received Icelandic registration) are named after ancient Norse goddesses - Ran, Sif, Syr (TF- being, of course, the nationality indicator). That is not too

Continued on page 91

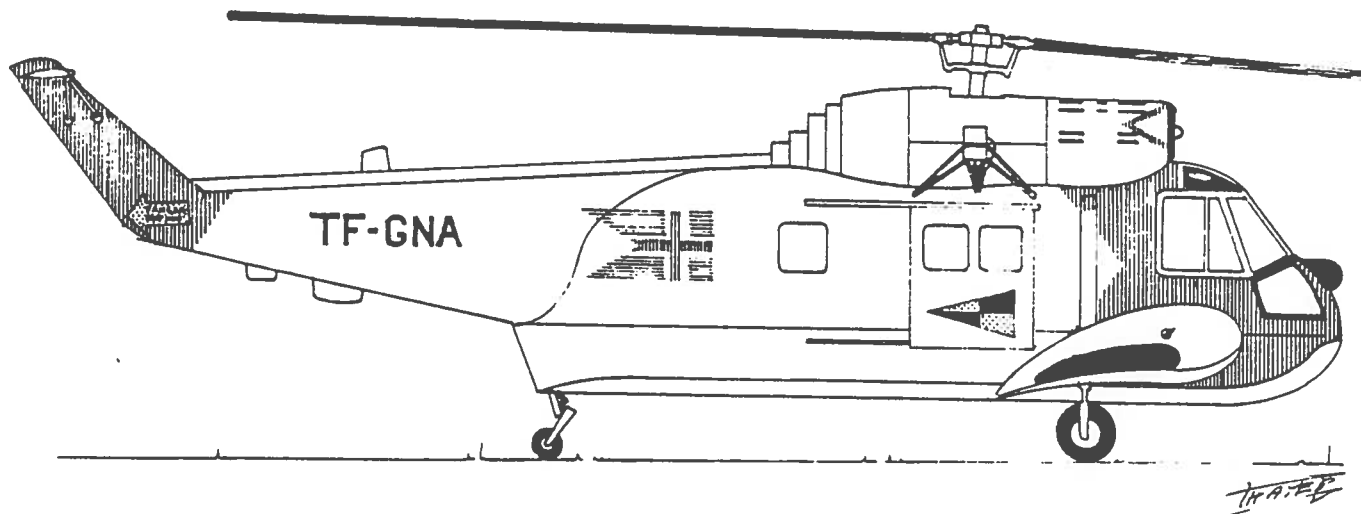
Grumman HU-16C "ALBATROS"

Máluð samkv. litastaðli bandaríska flotans, hvít/dökkgrá  
Standard USN scheme, white/seaplane grey,



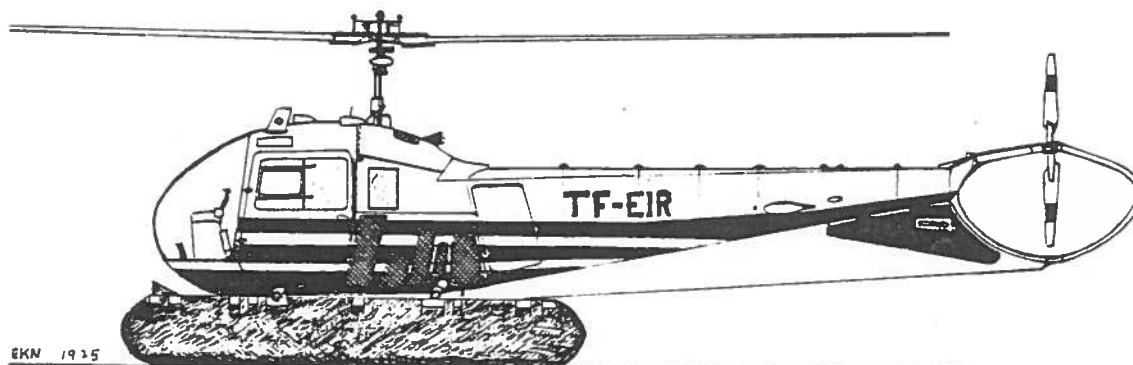
Sikorsky H-52A

Máluð samkv. litastaðli bandarísku strandgæslunnar, hvít/rauð. Letur(TF-GNA)/rautt.  
Standard U.S.C.G. scheme, white/red. Lettering (TF-GNA)/red.



Bell 47J-2a "RANGER"

Hvít með bláum röndum.  
White with blue trimming.



EKN 1925

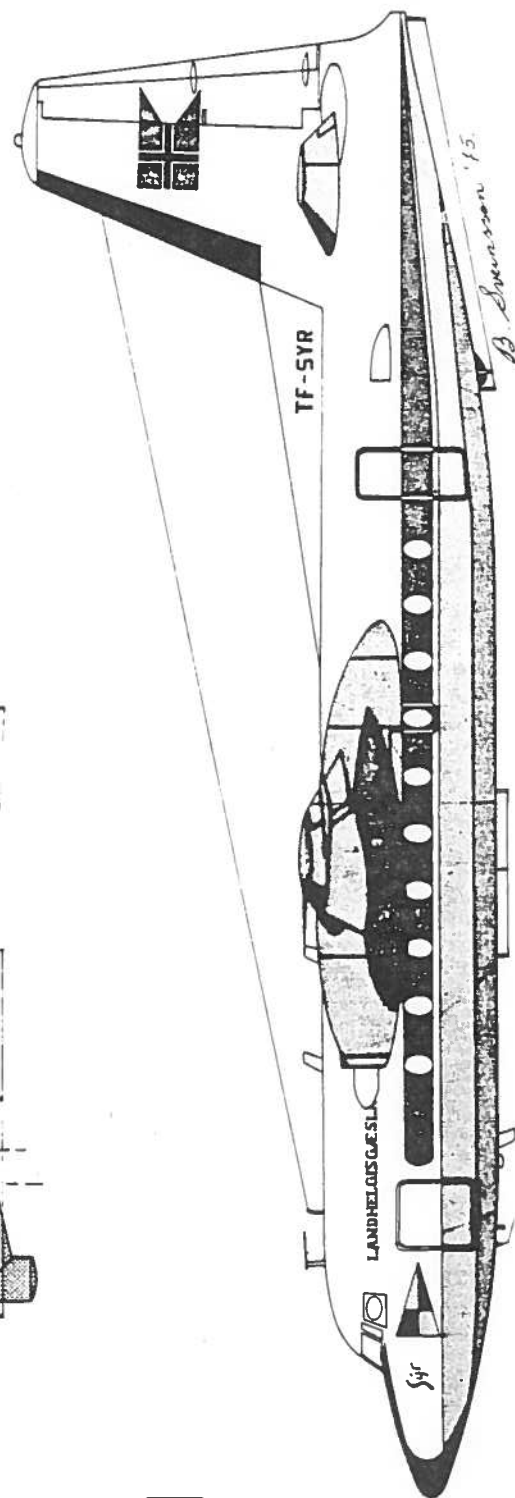
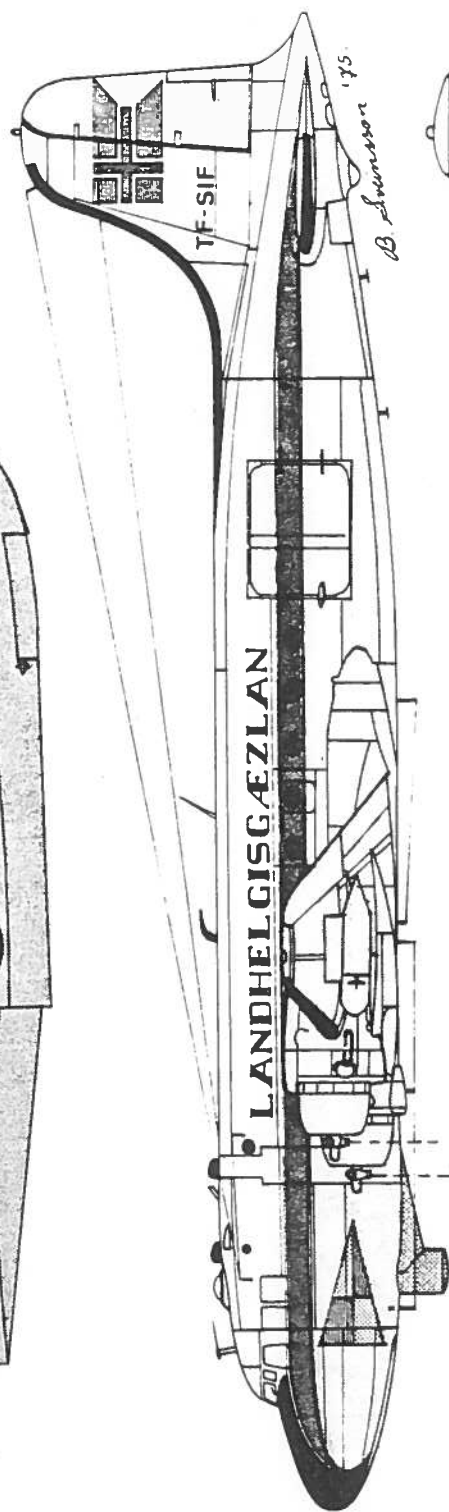
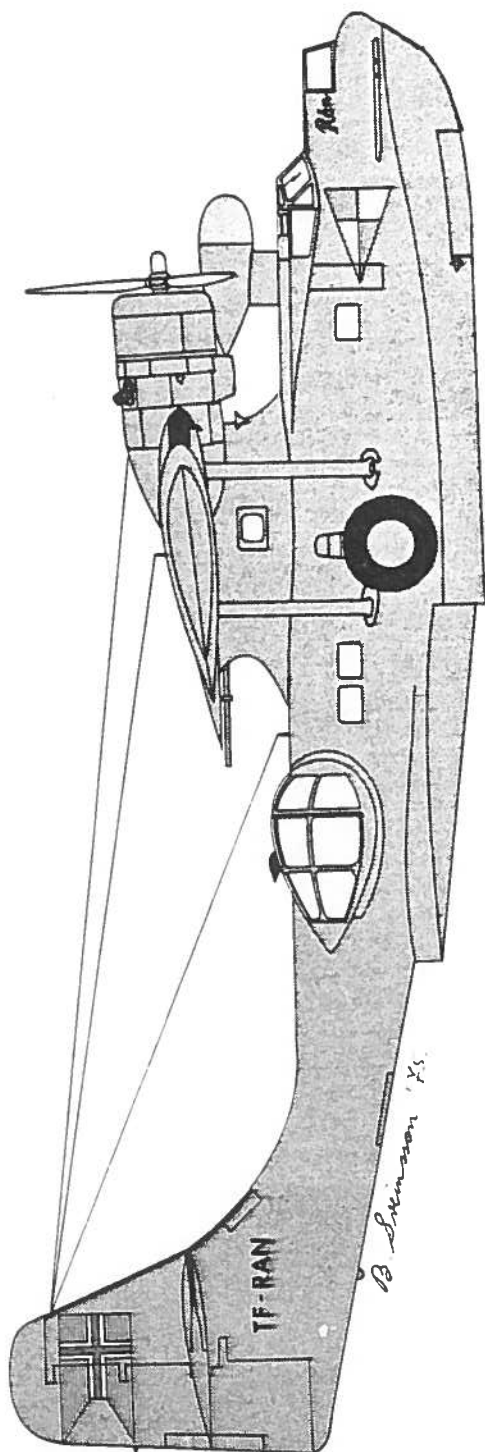


**COLOUR CODES**

**TF-RAN:**  
 Heildarletur/milligrætt. Letur/svart.  
 Overall gloss medium grey. Lettering/black.

**TF-SIF:**  
 Strokkur að ofan/hvítur, að neðan/adjallitur.  
 Strokkur/milligrætt með mjóðum svörtum randum.  
 Ratafchill/ljósgrá. Letur/svart.  
 Fuselage upper surface/white. Diherservice natural  
 metal except for fuselage stripe/medium grey  
 with narrow black lines. Radome/lc. grey. Let-  
 tering/black.

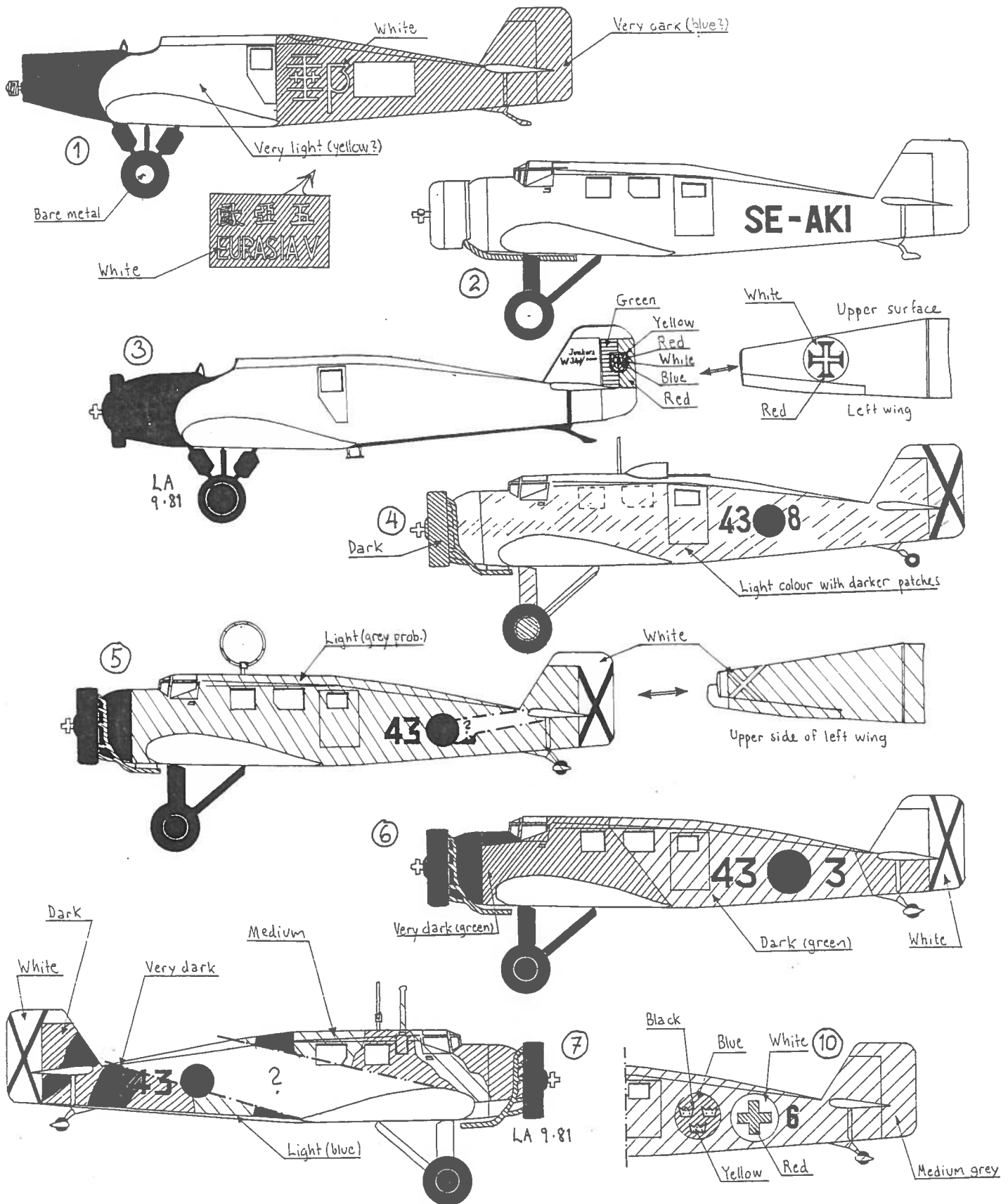
**TF-SIR:**  
 Vangir, bregflar og behrastfíslar/letur/ljósgrátt.  
 Strokkur að ofan/hvítur, að neðan/sílfur brons  
 (adjallitur). Strokkur/rauh. Letur/rauh & hvítur  
 grunnur en svart & grám.  
 Wings, engine nacelles and horizontal stabiliz-  
 ers/lc. grey. Fuselage upper surface/white,  
 fuselage diherservice/silver (patinae); fuselage  
 stripe/red. Lettering/red on white background  
 and black on grey background.

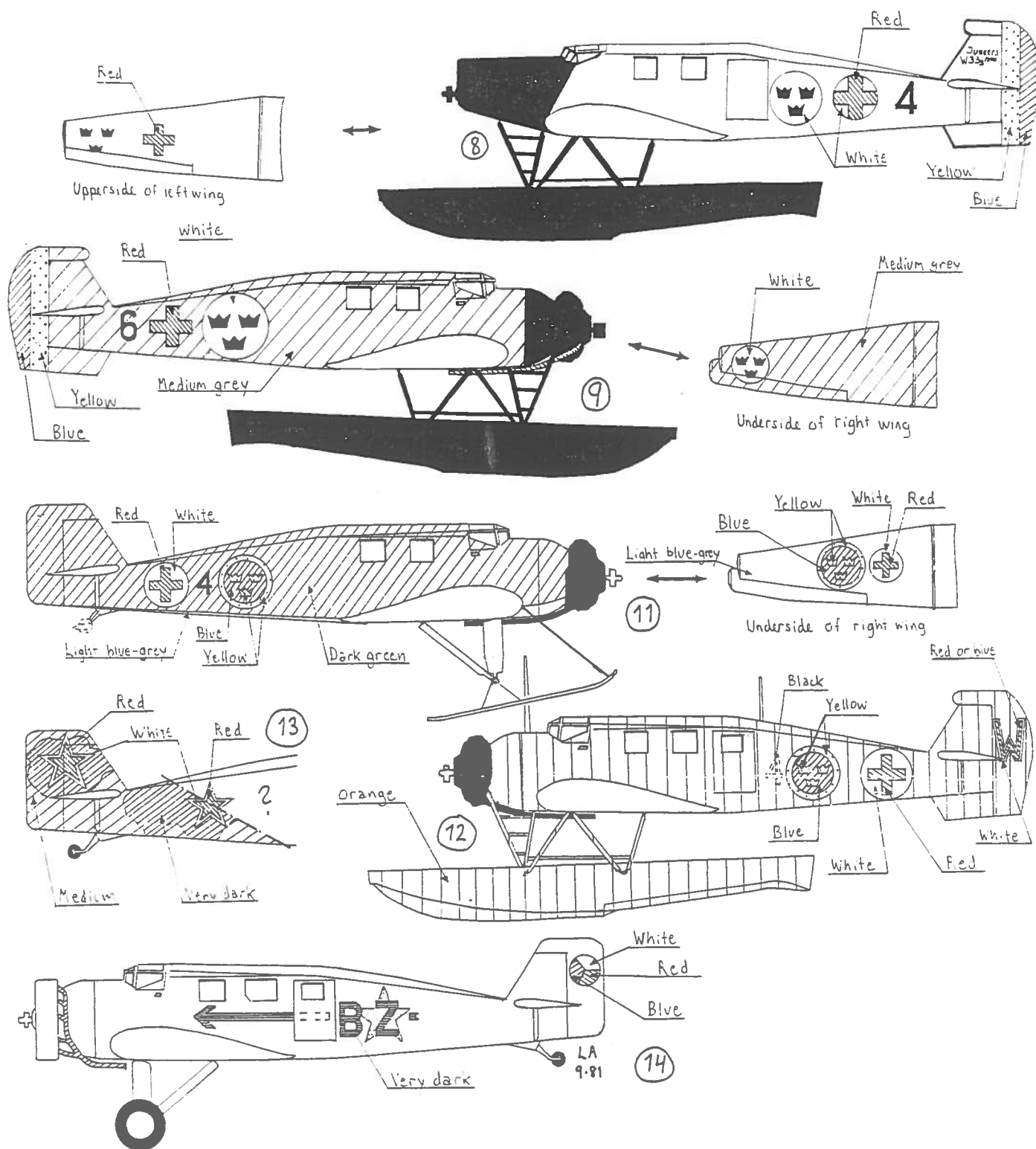


SAMNEIGNLEGR LITUR	COMMON COLORS	
	RED	RAUÐI
	BLUE	BLÁTT
	YELLOW	GULT
	WHITE	HVÍTT

# THE WORLD OF JUNKERS

Part Seven - The JUNKERS W.33, W.34, & K.43





1. W.33d EURASIA V of the Eurasia company; used some time between 1932 and 1935 by the Chinese military for reconnaissance flights.

2. W.34ho SE-AKI bought by the Norwegian Air Force and used (with Swedish civil markings) for liaison flights between Sweden and Norway in April and May 1940.

3. W.34b of Portuguese Air Force 1928. (K.43fy of Portuguese naval aviation was shown in SAFO #3.)

4-7. W.34hi of Spanish Nationalist Air Force.

8. W.33g ambulance No. 4 of Swedish Air Force 1933. This aircraft was converted to a W.34 in 1935.

9. W.34h ambulance No. 6 in 1935.

10. Same aircraft in 1938.

11. Same aircraft circa 1942. Code "71" in white later added to nose and fin/rudder.

12. Same aircraft in 1948.

13. W.34hi in Soviet Air Force markings. Ex-Slovak aircraft.

14. W.34hi "BZ" of Czechoslovakian Air Force 1946. Note washed off Soviet red star insignia. This aircraft was first flown by the Slovak Air Force, and then by the Insurgent Air Force in the autumn of 1944. It carried Soviet markings 1944-45.

Lennart Andersson (SAFCH #68), Liljeg 9A, S-752 24 Uppsala, SWEDEN.

Ron Andrini's (SAFCH #458) drawing of a Cuban Sea Fury in SAFO #20 triggered a series of letters that revealed a serious inconsistency in the published information.

One version is reported in "Sea Fury Round-up" by K. Ellis in MILITARY AVIATION REVIEW January 1981: "Batis-ta's regime received 15 FB.11s and two T.20s in 1958. They were absorbed into the Revolutionary Air Force of Castro during the following year and helped to defend the island during the abortive 'Bay of Pigs' invasion of April 1961 (surely the last 'action' the Sea Fury has seen?). Two are known to survive - perhaps there are others? 541 FB.11 Bay of Pigs Museum, Playa Giron. 542 FB.11 Museum of the Revolution, Havana. Both wear Cuban serials/codes, ex FAA serials unknown."

Contradictory information is reported by Hal Ahrens (SAFCH #216) who writes "An article, written by P. Amos, in the March 1966 AIR BRITAIN DIGEST, titled "Four Years at Dunsfold," presents the following information on the Cuban Sea Furys. According to Mr. Amos, there were 10 ex-FAA Sea Fury FB.11, which had been converted for Cuba in late 1958, on hand at Dunsfold Aerodrome, England, in 1963. These aircraft were finished in primer grey and had class B registration painted in black on wings and fuselage. The aircraft concerned were: G-9-37 (WG-626), G-9-38 (WG-593), G-9-42 (WE-800), G-9-43 (WM-493), G-9-44 (WM-494), G-9-45 (WZ-632), G-9-46 (WE-790), G-9-47 (WG-622), G-9-58 (WZ-654), and G-9-59 (WZ-655).

"In addition, there were 6 other Sea Fury FB.11 scheduled for delivery to Cuba but not converted. All were still in FAA finish. The aircraft concerned were: WE-687, WG-623, WE-792, WJ-209, WG-594, and WN-484. WN-484 had been assigned the class B registration G-9-48, but the aircraft had not been refinished and the registration was never applied. WJ-290 had the wings of WE-717.

"The two Hawker Sea Fury T-20 scheduled for delivery to Cuba were also at Dunsfold in 1963. They were ex-FAA VZ-352 and VZ-364, neither of which had been converted and were still in FAA finish.

"These 16 Sea Fury FB.11 fighters and 2 Sea Fury T.20 trainers were transferred to Deelen, the Netherlands, between February and June of 1964 as part of an exchange for 22 Hawker Hunters of the Dutch Air Force. These Hunters were originally to have been used in fire fighting tests at Deelen when Hawkers realized that there was a potential export market for the airworthy Hunters and not for derelict Sea Furys.

"All Cuban Sea Fury FB.11 and T.20 were apparently destroyed in fire fighting tests at Deelen by October 1964.

"Now that I have supposedly accounted for 18 of the 17 Hawker Sea Furys, where did the Cuban Air Force acquire number 541? I assume that it was the demonstrator Hawker Sea Fury originally delivered to Cuba for testing. Does anyone have a better explanation?"

An incontrovertible fact is that photos exist of Cuban Sea Furys with two different fuselage numbers (541 & 542). Let's look at this evidence: Hal Ahrens writes "I have a number of photo clippings of aircraft 541, all having the usual red, white and blue tail markings with a star on the red triangle and a yellow prop spinner. One photo shows 541 with fuselage markings of the blue circle with a red triangle on which is superimposed a white star. This aircraft appears to have a two-tone green

camouflage finish of zebra-stripe type. The yellow '541' on the fuselage is toned down, so that it is hardly discernable. The canopy is outlined in what appears to be natural metal. The other two photo clippings, one in color, show the aircraft in a two-tone light and dark green spotted camouflage scheme, no fuselage insignia, but a bright yellow '541' on the fuselage sides. No wing insignia are discernable on any of the photos. The color photo is credited to J.J. Suarez. I have only one other photo clipping of a Cuban Sea Fury and it shows the aircraft in what appears to be a solid dark green finish (as shown in SAFO #20) including the prop spinner. The under wing and fuselage insignia is a five-pointed star in either yellow or white with a red outline. The tail cannot be seen in the photo. This photo was reportedly taken at Columbia Air Base, Cuba, in 1959 by Jorge J. Suarez."

A.G. Boak (SAFCH #460) writes "I know of two photos, both in color. One was in a recent magazine - I believe it was an AIR CLASSIC - but I cannot find the photo in my collection. It wasn't terribly good, anyway. A far superior one appeared in the French magazine AVIATION INTERNATIONAL 15/28 Fevrier 1977. I enclose a Xerox of a tracing I made." The photo shows '541' from 3/4 rear view and is said to have been taken at La Playa Giron in December 1976. Standard national insignia are carried on the rudder, fuselage, and upper surfaces of the wings. The aircraft carries a pair of rockets under each wing and is finished in dark green and mid-green zebra-type camouflage pattern.

Bruce Kamiat (SAFCH #292) reports on a photo of what appears to the same aircraft: "A photo of a Cuban Sea Fury appears in L+K #8, 1981. It shows an aircraft in what appears to be a three-color camouflage scheme, with natural metal canopy framing, rockets under the wings, and two cannon in each wing. I've also heard verbal reports of Cuban Sea Furys in overall silver dope." The L+K photo shows the aircraft from 3/4 front with the wing hiding any fuselage number, and with the tail, outer wing sections, and spinner off the edges of the photo. The camouflage pattern appears to be of the two-tone zebra type with a third color possibly on the under surfaces.

Finally, Jean Paul Garcia (SAFCH #573) has sent a color slide: "I was in Havana in July 1978 and photographed two aircraft on display in the Havana Revolution Museum. One is a Kingfisher of the Cuban Navy and the other is a Sea Fury with a very peculiar canopy. The colors of the Sea Fury are dark green and olive green. Both aircraft carry the standard national insignia on the fuselage and upper surfaces of the wings, but no insignia is carried on the under surfaces of the wings." The slide shows aircraft '542' (finally) in exactly the same zebra-type camouflage scheme as the AVIATION INTERNATIONAL photo of '541'. No rockets are carried and the canopy is indeed very strange - more like a racing canopy.

Thus, it appears that there are indeed two Sea Furys in Cuba and that these a/c have carried a variety of different color schemes and markings. It appears improbable that 541 and 542 are the same a/c with different numbers applied, or is it? However, on the bases of the photographic evidence alone, it is impossible to determine if there were more Sea Furys in Cuba. Further light (or smoke) on this issue would be greatly appreciated.

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"In reference to Henk Schakelaar's letter in SAFO #19, I would like to confirm that, to the best of my knowledge, the Portuguese AF did operate ex-Luftwaffe Sabres. Fifty were transferred and integrated into their F-86 fleet. As the Germans used only Canadair Cl-13B Sabres, it is safe to assume that it was these which were delivered to Portugal. I would be interested in evidence to the contrary.

"Portugal's first A-7P Corsair was delivered on 21-12-82, serialled 5501 and finished in standard USAF A-7D scheme. The PAF a/c will be re-built USN A-7A and

the first batch consists of 9 aircraft.

"Portugal's T-38A Talons have been renumbered in the usual four-digit serials in place of their original USAF numbers. These serials are unknown at this time.

"Can anyone tell me the colour scheme for the Chilean Navy T-34 Mentors.

"Finally, can anyone tell me a paint match for Israel's brown helicopters (for modeling purposes)? It is giving me some headaches."

Mick Burton (SAFCH #303), 1 Norwood Walk West, Bobbing, Sittingbourne, Kent, ME10 1QF, ENGLAND.

"I have read with interest the article by Gus Morfis on the Northrop N-3PB in SAFO #17 and the follow-up letter from Carl Vincent in SAFO #19. Both the article and the letter are excellent, and I would like to try to answer most of Carl's questions while correcting a few minor errors that appeared in the original article.

"The first flight of the N-3PB could not have taken place on 1 November 1940 since the first aircraft was not rolled out of the factory in Los Angeles until 13 December 1940. The first flight actually took place on 22 December 1940.

"The original contract stated that the first aircraft was to be delivered in August 1940, to be followed by 2 aircraft in October, 8 in November, and 9 in January 1941. Delays caused by special Norwegian requirements, such as pedestal-mounts for the floats instead of the original N-shaped struts to allow for torpedoes and bombs to be slung below the fuselage, late delivery of engines and floats, etc. resulted in the delivery of the first aircraft being delayed first to September 1940, then to November, and finally to mid-January 1941. It was finally delivered on 5 February 1941.

"The Norwegians had chosen Island Airport in Toronto as their training center from three alternatives given by the Canadians. This choice was made because Island Airport provided facilities for both the landplanes of the Royal Norwegian Army Air Force and for the seaplanes of the Royal Norwegian Naval Air Force.

"In October 1940, it became evident that training on the Northrop N-3PB could not begin before Lake Ontario froze over. Therefore, the Norwegian officials asked the RCAF to provide a alternative base from which to operate these seaplanes until the waters around Island Airport were ice free. This is why the Norwegian Northrops were sent to Vancouver, British Columbia.

"All 24 N-3PBs were test flown at Lake Elsinore east of Los Angeles. It was here that experienced Royal Norwegian Naval AF pilots received their first training for their later duties as instructors. The first 6 aircraft delivered were flown directly to Jerico Beach in Vancouver. The first accident was, however, not on a delivery flight but as follows: On 21 February 1941, two student pilots, Inge Storheil and Conrad Helgesen, both of whom had their primary training at the Toronto Flying Club, were to conduct their first solo flights on the N-3PB. Helgesen was first out. Aircraft 303 with instructor Harald Kruse and pupil Erling Jorgensen lead Mr. Helgesen on his takeoff. When reaching 1000 ft, 303 started into a shallow dive that continued until the plane crashed into the sea. The reason for the crash was never determined.

"The next accident at Vancouver involved aircraft 305. On 18 March 1941, instructors Kaare Kjos, Jens Riser, and Erik Bjorneby took off for a trip to Patricia Bay to see that everything was OK in the target area before the shooting and bombing for the day commenced. The weather was calm and the plane took a couple of circles at sea to warm up before turning toward land to take off against the wind. The plane made a turn over the hangars and flew out to sea. The speed apparently was inadequate, the plane stalled and went into the sea some 200 feet from the shore. Kjos and Riser were killed and Bjorneby was severely injured. In Norway, these pilots had flown the MF-11 floatplane which was very light and could be flown very slowly. Perhaps the pilot had underestimated the effects of the heavy wingloading of the N-3PB.

"In April 1941, the remaining 4 aircraft were crated and sent by rail to Toronto. However, there is a possibility that one or more of these aircraft were first sent to the factor in Los Angeles. In Toronto, the aircraft were reassembled and test flown, the first two in May of 1941. The pilots, on the other hand, were sent directly to Halifax where they left in a convoy heading from Great Britain. On 23 May 1941, their ship left the convoy and the men arrived at Reykjavik the next day.

"We shall now leave the 4 aircraft which continued to be used for training duties in Toronto, and see what happened to the other 18 aircraft. Negotiations with the

RAF to form a squadron of these 24 N-3PBs on British soil had started in the autumn of 1940. Anticipating such difficulties as the building of maintenance facilities, acquiring spare parts, and teaching anti-aircraft gunner to recognize these unique Northrops, the British were reluctant to have these aircraft based on their soil. In Iceland, however, where there were too few aircraft to provide adequate convoy protection, the Northrops were most welcome, particularly since floatplane would not occupy the already overtaxed airfields.

"This offer was accepted by the Norwegian government early in 1941. Operationally, the aircraft would be under the Coastal Command Headquarters in Reykjavik. The 18 aircraft still to be delivered were all accepted in March 1941 and they were crated and sent by rail to New York. Here they were hoisted on board the Norwegian steamer 'Fjordheim' along with some 500 tons of depth charges and ammunition. The ship sailed to Halifax, Nova Scotia, where equipment and supplies sufficient to 'survive one year in a deserted island' were taken on board. The convoy left Halifax on 6 May 1941 destined for England. S/S 'Fjordheim' left the convoy and reached Reykjavik on 19 May. She came alongside the dock on 22 May and had finished unloading by 31 May 1941.

"330 Squadron was not formed at 'Little Norway' as conjectured by Gus Morfis. On 12 April 1941, 15 men from the Royal Norwegian Naval AF arrived in Iceland from Great Britain. Two days later, 26 men from Halifax arrived accompanied by 5 surviving sailors from the torpedoed Norwegian tanker 'Lincoln Ellsworth'. Their residence was Corbett Camp which was taken over from a Fleet Air Arm 'Walrus' squadron, the camp being named after the leader of the FAA squadron. It was situated in Fossvogur Bay outside Reykjavik, and had originally belonged to the town's Rowing Club. On 24 April, the first contingent from 'Little Norway' arrived with 2 officers, one doctor, 6 student pilots, 3 scout-pupils, 8 radio operators, 14 quartermasters, and 44 privates. On that same day, the appointed squadron leader, Captain Hans Bugge, arrived from London. The next day, 330 (Norwegian) Squadron was formed at Corbett Camp outside Reykjavik, Iceland. While waiting for the aircraft to arrive, more men came to the squadron until on 16 May there were 210 men present. No Norwegian squadrons were ever formed in Canada.

"Back to the 4 aircraft in Toronto. Aircraft 307 was lost here on 20 June 1941. As the aircraft was taking off, a ferry boat suddenly appeared from behind a headland; the plane hit the top of the boat's superstructure and fell into the sea. Instructor Finn Kjos and pupil Trond Harsvik were killed. The remaining 3 aircraft (302, 304, & 306) continued as trainers until March 1942 when they were sent to New York, taken aboard the S/S 'Delta', and shipped to Reykjavik where they arrived in April 1942 as reinforcement for aircraft lost in Iceland.

"Due to minor accidents, more than one aircraft frequently carried the same code. For example, three different aircraft carried the code GS-G. The number of Northrops stationed at Reykjavik, Akureyri, and Budareyri varied all the time. The Catalinas loaned by the RAF to 330 Squadron were not sent to make up for N-3PB losses but because it was obvious almost from the start that the N-3PB was not suited for convoy patrol over the North Atlantic. The Squadron was disbanded in Iceland and the Catalinas were returned to the RAF. The remaining Northrops, except for two, were broken up and the squadron was reformed in Britain with Sunderlands where the squadron codes were changed from GS- to WH-.

"Carl Vincent mentioned that the RCAF asked is one or more of the N-3PBs could be retained in Vancouver because of the fear of a Japanese invasion. I believe that this was actually after the planes had left for Toronto, but I am not sure. One thing is certain, however, it never materialized.

"The personnel trained in Canada by the Royal Norwegian Naval AF went not only to 330 Squadron in Iceland (and later in Great Britain) but also to 333 Squadron

Continued on page 91

"I received SAFO #21 a few days ago and I would like to make a few additions and correction to the article on the Argentine Ducks:

"The first Ducks received by the Argentine Navy were eight Grumman model G-20 delivered in 1937. These aircraft were initially serialied M-O-1/M-O-8, the "M" indicating that they were under the command of the Aviacion de la Flota de Mar. Two years later, four Grumman model G-15 Ducks arrived. (In his book, Rear Admiral Pablo Arguindeguy reports that seven G-15 were delivered making a total of 15 Ducks, serialied M-O-1/M-O-15. But, documents from the Direccion de Material Aeronaval indicate that only four G-15s were delivered. There is no evidence that serials M-O-9/M-O-12 were allotted.) In 1948, 22 J2F-5 and 9 J2F-6 were delivered to the Argentine Navy. When added to the 8 G-20 and 4 G-14, this makes a grand total of 43 Argentine Ducks.

"The serials assigned to the 'original' Ducks were: 0068/0074 to the G-20 (the eighth Duck, c/n 361 code M-O-5 which crashed in 1938, is not included in this serial range). 0090/0093 was assigned to the four G-15s.

"The J2F-5/-6 were coded 2-O-1/2-O-30. One of the 'new' Ducks was lost on 3 July 1947 (not 4 July 1947) at Comandante Espora NAS killing the pilot Teniente de Corbeta Antonio Toscano. Since this aircraft was on its acceptance flight, it was never coded.

"In 1939, the Argentine Navy created two units to operate the 'original' Ducks: Escuadrilla Aeronaval de Observacion de las Escuadra Aeronaval No. 2 (aircraft coded 2-O-xx) and No. 3 (aircraft coded 3-O-xx). Escuadra No. 2 was based at Comandante Espora NAS and was initially commanded by Teniente de Fragata Julio Zavalla and Lisardo Aleman. This unit was disbanded in late 1956 at which time it was commanded by Capitan de Corbeta Miguel Alganarez and Teniente de Navio Luciano Carlahan. Escuadra No. 3, initially commanded by Teniente de Fragata Carlos Nunez Monasterio and based at Punta Indio NAS, operated a mixed group of Fairey III/IV, O2U-1A, and G-15. This unit was disbanded in 1944 at which time the commander was Teniente de Fragata Ignacio Albarenque.

"The Ducks assigned to Escuadra Aeronaval No. 2 were coded 2-O-1/2-O-8. Since M-O-5 crashed at Puerto Belgrano NAB on 27 May 1938 (killing the pilot Alferes Rosister and the observer Marinero G. Casso), it is evident that the unit must have possessed seven G-20 and one G-15. I have been able to identify only two Ducks from this unit: 0068/M-O-1 c/n 357 which became 2-O-1. This plane was damaged on 16 May 1946. It was repaired only to be severely damage on 26 October 1946 and wfu in 1947. The other Duck is 0069/M-O-2 c/n 358 which became 2-O-2. This aircraft was seriously damaged in late 1946 or early 1947 and was officially deactivated in 1947.

"The heterogeneous group of Escuadra Aeronaval No. 3 included four Fairey III/IV coded 3-O-1/3-O-4; four Vought O2U-1A coded 3-O-5/3-O-8; and three Grumman G-15 coded 3-O-9 (c/n 615), 3-O-10 (c/n 613), and 3-O-11 (c/n

61x). I have photographs of all three G-15 with 3-O-xx codes and of O2U-1A coded 3-O-7. Thus, the G-15 never carried codes 3-O-5/3-O-7. When this unit was disbanded in 1944, the Ducks were transferred to Escuadra Aeronaval No. 2 and given 2-O-xx codes.

"It is incorrect to assume that because of a lack of spare parts the Argentine Ducks were cannibalized during WW II. To the contrary, because of the hard work by the support personel all the Ducks, except M-O-5 which crashed, were kept in flying condition from 1937 to 1947/48.

"All the 'original' Ducks were phased out of service when the more advanced J2F-5 and -6 became operational in 1948: one in 1938, two in 1947, and 11 in 1948.

"The J2F-5/-6 equipped Escuadrilla Aeronaval de Observacion from 1948 to 1956. Codes applied were 2-O-1 to 2-O-30. When this unit was disbanded, the remaining aircraft operated in secondary roles at Comandante Espora NAS. Ten J2F probably survived until 1958 but only one until 1959.

The aircraft that took part in the revolutionary actions of September 1955 were J2F-5/-6 (not G-15 or G-20). The commander of Escuadrilla de Observacion, Capitan Estivariz, was killed in combat when his J2F-5, 2-O-6 was shot down."

"The following information is an update to my article on the 'Eswadrilla Aeronaval de Helicopteros' which appeared in SAFO #18.

"Bell 47D: Serial 0284; c/n 25; Test Markings NC171B; Delivered 31 March '48; Codes 1-HE-1, E-1, 1-HO-1, 2-HE-1, 2-PH-401.

"Current codes: 1° Eswadrilla Aeronaval de Helicopteros: SA316/SA319 Alouette = 3-H-101/3-H-115; WG13 Sea Lynx = 3-H-141/3-H-142. 2° Eswadrilla Aeronaval de Helicopteros: S61D-4 Sea King = 2-H-231/2-H-235.

"First flight of a helicopter in Argentine Navy markings: 23 May 1949. Made by 1-HE-3 crewed by Teniente Hermes J. Quijada.

"First landing of a helicopter on an Argentine ship: On turret III of cruiser "Admiral Brown". Made by Bell 47D 1-HE-2 (on floats) in May 1950. Pilot: Teniente Hermes Quijada.

"More on Argentine Navy DHC-2 Beaver: The Aviacion Naval definitely operated two DHC-2 Beavers. (1) c/n 129, code IAA 101 originally owned by the Instituto Antartico Argentino from 1956. Then delivered to the Navy when it became responsible for the Institute. Never received a Navy serial or code, but flew with naval anchors painted on wings and naval roundel on both sides of the fuselage. Destroyed in a fire on 29 May 1970. (2) c/n 1432 0502/3-G-6, then 0502/4-G-1. Received by the Navy at DHC factory on 7 October 1960. Active from 1 January 1961."

Jorge F. Nunez (SAFCH #395), Humboldt 2763/65, Bahia Blanca 8000, Buenos Aires, ARGENTIA.

## MUSEUM NEWS

"The Royal Air Force Museum, in association with Transvideo Productions Ltd., an independent television production company, has decided to produce a series of 60 minute television programmes based on the history of military aviation. The Museum archive already holds a unique collection of film which will be utilised along with footage from other usual agencies. However, in order to ensure that the best possible product is produced, we are seeking any further footage that may be available but hitherto unseen. World War Two material is particularly, but not solely, sought. Aircraft of all nations are of interest.

"Any documentary series needs an immense amount of research and planning; at this stage we know that an historically accurate and visually appealing series of programmes is possible but we do not want to miss any avenue that may be open to us. If you have any aviation film footage covering the period 1914 to 1950, of whatever

type, we would very much like to view it for possible inclusion in what we hope will be a definitive and important military documentary series.

"All letters to the undersigned will be gratefully acknowledged."

Dr. John Tanner CBE, Director, The Royal Air Force Museum, Hendon, London, NW9 5LL, ENGLAND.

"Your readers might be of help to the San Diego Aero-Space Museum library/archives. We are trying to collect the complete set of 'Janes all the Worlds Aircraft', since we lost our in the 22 February 1978 fire. Any help will be gratefully accepted. We need: 1909-1918, 1921, 1923-1926, 1929-1930, 1932, 1934-1935, 1939, 1941, 1948-1949/50, 1951/52-1954/55, 1963/64. 1965/66, 1971/72-1972/73, 1974/75-1975/76, 1977/78-1980/81."

San Diego Aero-Space Museum, 2001 Pan American Plaza, Balboa Park, San Diego, CA 92101



# Hansa Brandenburg Monoplanes

Perhaps the most famous German marine aircraft of the First World War were the Hansa-Brandenburgs of Zeebrugge. Under the command of Friedrich Christianssen they saw action against British Curtiss and Felixstowe flying boats, airships, surface craft, and submarines, running up an impressive series of victories in the process and winning the admiration of friends and foe alike.

By the middle of 1917 the biplane Brandenburg W.12, which had allowed the Germans to gain ascendancy over their opponents, was losing its superiority. Upon a suggestion from Christianssen, Heinkel, the Hansa-Brandenburg designer, developed the W.12 into a monoplane. The fuselage, tailplane and floats were virtually unchanged, whilst the single wing was of almost the same area as those of the biplane. The new aircraft received the designation W.29. The relationship of the W.29 to the earlier W.12 is humorously referred to by Heinkel in his autobiography. When the first W.29 flew over the Test Station at Warnemunde, people ran about in consternation, as they thought that a W.12 had lost its upper wing and was going to crash.

Four W.29's were ordered in the first batch (Marine No.2287-2300) and these aircraft had a horizontal tailplane of similar shape to that fitted to the W.12. At some stage this was changed to a more angular shape which was retained by the W.29's successors. The reasons for the change are not known; however, as will be related later, the W.29 displayed instability and this may have been an attempt to overcome this problem. No German records have been discovered to confirm this supposition.

Some 100 W.29's were ordered, although all were not delivered, and some may have been delivered as W.33's. The Austrian Navy also built the type, three being completed before the end of hostilities, but not taken on hand by the Navy. It is thought that some more were completed after the Armistice, but confirmation is lacking. At least one is represented as having taken part in the post-war Communist revolution, possibly used off the Danube. Again, confirmation is lacking.

In mid-1918 the Brandenburg W.33 appeared. A scaled-up more powerful version of the W.29, some 26 were delivered by the Armistice. The precise number cannot be stated as the above are stated to be W.29's by some sources. This confusion of models is the cause of frustration in trying to research the Brandenburg monoplanes. Each model resembled the others and photographic interpretation is difficult and almost impossible, except where very clear photographs are available. (The configuration of the Brandenburg monoplanes with their high-set tailplanes makes it impossible to determine from photographs which W.29's had the early tailplane.) A further improved version, the W.34, was produced before the end of hostilities. Basically a scaled-up W.33, six W.34's were ordered (Marine No.2726-2731), but only 2731 was completed before the Armistice, the other five airframes awaiting their 300 hp Basse und Selve BuS. V engines. 2731 was tested by the French after the War with an underslung Lamblin radiator. Musee de l'Aire photographs MA7439 and MA7440 show 2731 in French markings and are the only photographs seen by the author of the W.34. No details of the French tests are known.

According to one source, the five remaining W.34 airframes were sold to Finland. Smuggled out of Germany in pieces, they were erected at the Finnish Naval Base at Sontavala. Italian Fiat A.12 bis engines of 300 hp being installed. Finnish records state that no W.34's ever went to Finland. Captured Russian aircraft were operated by White Russian and Finnish pilots from Sartavala. As the powerplant quoted is the same as that installed in the Finnish IVL A.22, it is thought that this is another case of confusion between the various marks of Brandenburg monoplanes. This will be discussed further under the Japanese Brandenburgs. The usually

authoritative AIR INTERNATIONAL for August 1974 in its "Fighters A to Z" feature states in the article on the Brandenburg W.34 that some W.34's were completed after the Armistice. At this stage this author has been unable to confirm whether any W.34's other than 2731 were completed.

Before leaving the German-manufactured Brandenburgs, mention must be made of the W.37 project. An improved W.34, this project was used by Heinkel as the basis for his S.1 design. With the end of the War there were plenty of converted military aircraft to fulfill immediate commercial requirements. Heinkel left Hansa-Brandenburg and tried manufacturing electrical goods and converting ex-Army vehicles. Carl Casper has started his own aircraft manufacturing company and was commissioned by the U.S. Navy to design a stowable aircraft for use aboard submarines, and he engaged Heinkel as designer. This aircraft was the U.1, and was successful in that Japan also ordered two. This was in Allied-controlled Germany, where all military aircraft manufacture was forbidden. Heinkel developed the wartime project W.37 into his next aircraft, the S.1 for the Swedish Navy. These aircraft were manufactured in Germany and assembled by the Svenska Marinens Flygvasenda in Sweden. One S.1, known as the Type 32 in Swedish service, was exhibited at the aeroshow at Gothenburg in 1923. The English journal FLIGHT dismissed the S.1 as showing "a strong family resemblance to the Hansa-Brandenburg machines, and it seems likely that it was, at any rate partly, built in Germany." If only they knew the true facts!

Heinkel left Casper shortly thereafter and his first design from his own company, the He.1 was a revamped S.1. By now the familiar Brandenburg lines had blurred, but enough remained to show its thoroughbred lineage.

## THE FOREIGN BRANDENBURG MONOPLANES

Notwithstanding the Peace Treaty and the International Commission of Guarantees, Brandenburg exported three W.29's to Norway in 1920. The Norwegian importers, the Norsk Aeroplanfabrik in Tønsberg, commenced to build seven aircraft based on the W.29. Designated FF.8 "Make II" they are described as being a version between the W.29 and W.33. No dimensions are available and as it looks the same as other Brandenburgs in photographs, the existence of the "Make II" only confuses the history of the monoplanes even further. The name "Make" (Seagull) was used by the Royal Norwegian Army Air Force. One FF.8 was delivered to the J.L. Tiedemans Tobacco Factory in Oslo with civil registration N.21 as a five-seater with 300 hp Maybach engine. When the Norsk Aeroplanfabrik went bankrupt the aircraft were completed by the Norwegian Army. Two of the previously mentioned W.29's also flew in Army colors as 98 and 99.

The Norwegian Naval Aircraft Factory (Marines Flyvebaatfabrik) in Horten had bought the rights to the manufacture of the Brandenburg W.33 in 1920. Twenty-four W.33's were constructed between 1920 and 1929. A further four were built at the Army Aircraft Factory at Kjeller. When the Norwegian government decreed that all floatplanes were to be handed over to the Navy in 1928, these four plus one "Make II" were taken on charge by the Navy.

The W.33 was widely used in Norway. In 1922 two W.33's flew Horten-Kirkenes-Horten along the total coastline of Norway, a distance of 5200 kilometers. Operating from Svalbard, they once reached as far north as 81 degrees latitude. Apart from military duties, the Brandenburgs took part in fish searches, whale hunts, and postal services. The last Brandenburg was scrapped in 1935. Tor Kleppe, Commodore (ret.) Royal Norwegian Navy, who flew the W.33 as a young sub. lt. in 1931, recalls that "In good weather and sea conditions they were excellent. In case of turbulence, which you often have along the steep, rocky coast of Norway, they were rather sluggish and

heavy to keep steady. In case of forced landing in rough sea on account of motor cut-out, we could usually get them down all right, but when drifting before the wind, the tips of the low wings has a tendency of dipping into the sea tops with disastrous results to the aircraft. In a spin they were dangerous. Only one man, a test pilot, has managed to get her out of a spin and survive. We all knew that, so as soon as there was any indication of a start of unintended spin: Nose down, full throttle, and hope that you had enough height to clear the drink."

Finland purchased a license for the manufacture of the Brandenburg W.33 in 1921 and produced 122 at the Ilmailuvoimien Lentokonetehtäs (Aviation Force's Aircraft Factory) at Suomenlinna, near Helsinki. The first W.33 for the Ilmailuvoimien was ready on November 4, 1922 - the first aeroplane constructed in Finland. Designated A.22 in Ilmailuvoimien service, and fitted with French-built Fiat A.12 bis 300 hp engines, they served in the reconnaissance role from every naval air station in Finland. Construction continued until 1926 and the last A.22 in service was scrapped in 1936.

The A.22 was equipped for twin Lewis guns for the observer on a Scarff type mounting. Mounting points for twin Vickers machine guns, synchronized to fire through the propeller arc, were fitted but never used. Michelin hard-points for four 10 kgm bombs were fitted and a radio set could be carried. The A.22 operated on floats and skis. (Norwegian W.33's were operated off ice on their floats!)

Two A.22's were sold to Latvia but crashed soon after arrival. They were reconstructed by the Latvians. (It is not known if the crashed aircraft were used as patterns for two completely new A.22's, or if parts were supplied from Finland to repair the aircraft.) Unfortunately, no photographs of these aircraft have been seen by the author. (A few years ago a fellow aerohistorian was building a series of models of Latvian aircraft from the album of a former Latvian pilot, and the Brandenburg monoplane models were silver overall with Latvian red swastika in the usual six positions.)

The Royal Danish Navy bought a Brandenburg W.29 from Germany on July 14, 1919 and obtained a license to build the type. The first aircraft was used as a model for the production of 15 other W.29's by the Royal Dockyards (Orlogsværftet) at Copenhagen during 1921 to 1927. Designated HM.1 in Danish service and powered by a 150 hp Benz or 160 hp Royal Dockyards engine, the Brandenburgs were armed with one or two Disa (Madsen) machine guns on a Scarff-type mounting for the observer and, from 1924, a fixed 7.9 mm Vickers machine gun for the pilot. This latter machine gun was removed in the spring of 1927 because of weight problems. (These Vickers were later fitted to the Hawker Dancocks.) From 1926 the HM.1's were used by 1 Luftflotille until 1930. Some aircraft were fitted for dual control and two had Telefunken radio equipment installed.

The HM.1's underwent many changes and modifications in their service lives. Initially they had individual exhaust pipes fitted to each cylinder as per the German original. These were later replaced by a single long exhaust manifold discharging behind the wing. Persistent stability problems were not overcome until 1925 when the elevators were increased in area. The synchronized pilot's machine gun was removed, as related above, in an attempt to cure their nose-heaviness. 1925 also saw a detachable observer's windscreen and an auxiliary fuel tank, mounted under the fuselage, being fitted.

The HM.1 was used in the reconnaissance role until 1931. Three visited Holland in September 1922; five flew to Sweden and Finland in 1923. In June and July 1925, three HM.1's visited Poland, landing on the Weichsel River near Warsaw. The aircraft which replaced the HM.1 and was also manufactured by the Royal Dockyards was the HM.2 - a license-built Heinkel He.8 floatplane.

Lastly we come to the Japanese Brandenburgs. Last because there were more such Japanese-built Brandenburgs than by any other licensee, and because so little is known about these aircraft. The type of Brandenburg built for the Imperial Japanese Navy has been referred

to as the type W.29, W.33, and W.34. As mentioned previously, it is impossible to determine what type was manufactured from photographs. Official Japanese data have confirmed that these were in fact W.29's and the dimensions from these sources tally with the W.29. Japan received one W.29 in 1922 (Marine No. unknown) as war-booby and Nakajima and Aichi were ordered to produce a copy. It is not known if a license was obtained from the Hansa-Brandenburg company.

The Japanese Hansa-shiki Suijo Teisatsu-ki (Hansa-Model Reconnaissance Seaplane) looked radically different from the W.29 due to the use of a Japanese Hispano-Suiza V-8 produced by Mitsubishi as its powerplant. It is thought that the model produced by Nakajima had the (Hi)-type 300 hp version of the Hispano-Suiza, whilst that produced by Aichi had the (Hi)-type 200 hp version. In production from 1922 to 1925, 160 aircraft were produced by Nakajima and approximately 150 by Aichi. The total of 310 (approximate) is greater than any other model Brandenburg produced by the parent firm or its licensees.

The W.29 was not popular in Japanese service because of instability when taxiing on the water, and poor visibility. This latter assertion is surprising as we have seen how successfully the Brandenburg monoplanes performed for Germany, Denmark, Norway, and Sweden! The aircraft were in service until about 1930, when they were transferred to civil use. They were used for fishery patrols, postal service, besides their general military and civil duties.

Before concluding, mention must be made of the floatplane produced by the Van Berkel company in the Netherlands. Having built the Brandenburg W.12 under license as their model WA, this company produced a large floatplane of obvious Brandenburg influence as their model WB. This was an original design and not a copy of any Brandenburg model, although they are often referred to as Brandenburgs.

The above notes have been compiled after four years of research into the Brandenburg monoplanes. Many questions remain to be answered and the author would be delighted to hear from anyone who can help in any way. Some of the questions are: (a) Exactly when did the Hansa-Brandenburg company cease to exist? (b) Did the Germans experience any stability problems with the W.29, and if so, was this the reason for the introduction of the W.33 and the confusion in Marine Nos. of the later W.29 batches? (c) What happened to the reports on W.33 Marine No. 2670 which was tested at the Isle of Grain by the British, postwar? (d) What happened to the tests of W.34 Marine No. 2731 conducted by the French? Do any other photographs of the W.34 survive? (e) What was the fate of the other W.34's? Was the W.34 ever produced postwar as stated by AIR INTERNATIONAL?

#### THE SURVIVOR

Of all the Brandenburg monoplanes constructed, only one is known to survive. This is the IVL A.22 serialised IL-2 displayed at the Tampereen Teknillinen Museo at Tampere, Finland. This aircraft was based at Santahima and logged some 471 flight hours before its last flight in July 1927. (Most A.22's logged over 600 hours.) Magnificently restored by Finnair at Helsinki, this aircraft carries the blue badge of the Satahima base on the cream fuselage, natural metal panels, grey in plan view, with undersides and fuselage sides cream.

#### ACKNOWLEDGEMENTS

This article has been compiled from information generously supplied by the following individuals and organizations: Peter Grosz, Stein Gulli, Tor Kleppe of Norway's Marinemuseum, Norsk Teknisk Museum, L.A.T. Ege of Denmark's Flyvemuseum, Harry Woodman, Masaki Kozima, Kari Stenman, Bill Toohey, Janne Pauni of the Finnish Aviation Museum Society, and Mannosuke Toda of KOKU-FAN.

#### ADDENDA

From P.M. Grosz's research in the War Archives in Vienna: 25 Brandenburg W.29's were ordered from UFAG on 26 August, 1918; the first 3 to be delivered by

31 October 1918 and the remainder by 31 December, at a cost of Kr. 100,000 each. Serial numbers C 1 to C 24 were allocated (after being initially designated A 181 to A 205, then R 200 to R 224 before finally adopting the C series). The UFAG-built C 1 made its maiden flight on 25 October 1918. Photos confirm the existence of C 3 and others may have been completed.

Col. Johan E. Høver, former C.O. of the Naval Aircraft Factory (Norway), obtained plans for the W.33 from an office in Hamburg in 1920. He collected a complete set of drawings and construction information necessary for the building of the W.33 in Norway. Høver also states that the "Make II" was identical with the Navy's W.33 and that a hybrid W.29/W.33 did not exist.

#### BRANDENBURG MONOPLANE MARINE NUMBERS

2203-2206	W.29	Benz Bz IIIa
2287-2300	W.29	150 hp Benz Bz III
2501-2536	W.29	150 hp Benz Bz III
2538-2540	W.33	260 hp Maybach Mb IVb
2541-2542	W.33?	300 hp Basse und Selve
2543	W.33	245 hp Maybach Mb IVa
2544-2563	W.33?	260 Maybach Mb IVb
2564-2583	W.29	Benz Bz III
2584-2587	W.29	185 hp Benz Bz IIIa
2588-2589	W.29?	
2593-2643	W.29?	Benz Bz III or Bz IIIa
2653-2675	W.29?	Benz Bz IIIa
2683-2684	W.33?	Maybach Mb IVa
2726	W.33?	Maybach Mb IVa (W.34?)
2727-2731	W.34	2731 known to be completed

Note: ? indicates tentative only.

#### BRANDENBURG MONOPLANE MARINE NUMBER 2570

This aircraft has been represented as a type W.33 in many publications (GERMAN AIRCRAFT OF THE FIRST WORLD WAR, Gray & Thetford; the Harleyford books; and AIR INTERNATIONAL). According to Brandenburg factor three-views, only the W.29 has a cut-out in the trailing edge of the wing over the first three ribs. 2570 displays this feature in two known photographs which are front views of this aircraft (one is IWM photo MH2922, the other appears in Gray's book). The other two known photographs of this machine show the port side and it dis-

plays the characteristic engine panels of the W.29, but with an unusual exhaust manifold which is on the port side of the engine (IWM photo MH2924 and Nowarra photo 10663). All these photographs show the aircraft in British markings supposedly at the Isle of Grain. The Nowarra photo shows that it was repainted at some stage, the R.A.F. cockades being increased in diameter to completely cover the German markings and the Marine Number being outlined in white. Whilst this is not conclusive proof, it appears that the aircraft is a W.29 and not a W.33. A list of known Brandenburg Marine Numbers is appended compiled from information published by P. Grosz, H. Woodman and other sources. It will be noted that 2670 falls in a batch which has been tentatively identified as W.29's. The only known German W.33 that the author has been able to obtain photographs of is Marine Number 2538. This aircraft displays the straight trailing edge of the wing without cutouts. It is therefore suggested that the batch 2653-2675 was indeed of W.29's.

#### REFERENCES

AIR INTERNATIONAL, August 1974  
 ATLAS DEUTSCHER UND AUSLANDISCHER SEEFLUGZEUGE, 1918  
 FIGHTER AIRCRAFT OF THE '14-'18 WAR, Harleyford  
 FLIGHT, July 26, 1923; August 2, 1923  
 GERMAN AIRCRAFT OF THE FIRST WORLD WAR, Grey & Thetford  
 He.1000, Heinkel  
 JANE'S ALL THE WORLD'S AIRCRAFT, 1920-1930  
 MODEL AIRPLANE NEWS, July 1972  
 THE '14-'18 JOURNAL, 1972-73

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(Editor's note: This article first appeared in the February 1977 issue of WORLD WAR I AEROPLANES and is reprinted here with the gracious permission of their editor, Leonard Opdycke. For those not familiar with this magazine, WORLD WAR I AEROPLANES is devoted to aircraft of the period 1900-1919, and includes information for builders, restorers, modellers, and historians. A sample copy of the Journal cost \$4.00, and membership, which includes five issues of the Journal, costs \$16 (tax deductible). Both may be obtained from World War I Aeroplanes, 15 Crescent Rd., Poughkeepsie, NY 12601, USA.)

#### ICELAND

Continued from page 81

funny, but then we come to the two Bell 47s, HUG and MUN. In the old myths, the central god, Odinn, had two ravens which he sent out to scout for him. They would return, perch on his shoulders, and report. The two Bells, HUG and MUN, were selected with the idea of operating them off helicopter decks of the ICG cutters ... one of which was named Odinn.

For many years, Icelandic aircraft were registered TF-ISx, the Icelandic spelling of the country being Island. Later it was changed to TF-FIX - for Flugfelag Island. The other airline, Loftleioir, first used TF-RVx, being based in Reykjavik, later changed to TF-LLx. These airlines have now been merged, and the latest aircraft, acquired last year, are DC-8-62s registered TF-FLA and TF-FLB, the merged airline being called Flugleioir.

The real area for humor comes with private aircraft, augmented by the fact that Icelandic, in common with other relatively old, unmixed languages, has a wealth of short words ... for instance of three letters. One entertainer/reporter with a weakness for puns owns a Cessna registered TF-FRU. FRU is the Icelandic word for Mrs., and when he says that he is spending the weekend on the Mrs., one wonders. Then there is a rather egotistical JEG meaning I, an old Piper AFI (grandfather), a MAO, EGG, HIM, UFO, JET, and so on.

(Editor's note: This article, as the preceding one, is reprinted with the kind permission of IPMS-ICELAND. It also first appeared in the 1976 edition of ISMO.)

#### NORWEGIAN N-3PB

Continued from page 87

which was formed at Leuchars in May 1943 using Catalinas and later Mosquitos. The pilots trained in Canada by the Royal Norwegian Army Air Force went to either 331 or 332 Squadron in England. Some pilots from both Air Forces joined British squadrons.

"I have never heard of the rumors mentioned by Gus Morfis that the Norwegian N-3PBs sighted the German battleship "Bismark".

Knut H. Naess (SAFCH #519), Framnesvegen 10, Jeløy, N-1500 Moss, NORWAY

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LOCKHEED HERCULES PRODUCTION LIST, 1954-1983. Fourth Enlarged Edition, by Lars Olausson (SAFCH #361).

As Lockheed's order book grows, so does Lars' book; from c/n 4828 and 56 pages in 1979 to c/n 4982 and 72 pages in 1983. In the 4 years between editions, the number of countries using the Hercules went from 47 to 54, with Algeria, Dubai, Iraq, Japan, Niger, Oman, Thailand, and Yemen added (and the Ivory Coast deleted). Not only have new c/n's been added, but old ones are updated and corrected. For example, the two Cameroon AF C-130H (c/n 4747 & 4752), delivered as TJ-XAC & TJ-XAD are now TJX-AC & TJX-AD. This excellent book can be obtained from Lars Olausson, Box 142 S-53032 Satenas, SWEDEN, for \$3.00 cash or \$4.00 cheque (surface mail included).

# Hungarian UFAG W.29

The W.29 monoplane soon proved itself a worthy successor to the earlier Brandenburg W.12 biplane, enabling the Imperial German Navy's floatplanes to meet the English flying boats over the North Sea on equal terms during 1918. The success of the W.29 was noted by Germany's Austro-Hungarian ally and after futile attempts to obtain the aircraft direct from Germany, the KuK decided to build the type under licence. Many previous Brandenburg designs had been built in Austro-Hungary and there were good relations between the Brandenburg company and the KuK.

The negotiations were confirmed in an order from the Wellen der Marinesektion der Kennungen (Marine Section of the Austro-Hungarian War Ministry) to UFAG in Budapest on 5 June 1918 to "build 25 seaplanes, C-planes, newest type at a price of 2.3 Mill Kronen (not including the 10% charge for patent rights)". (1) The UFAG factory confirmed the order and at the same time notified the authorities that because of a strike in the factory they could not start on the construction of the airframes!

The UFAG Brandenburg W.29s were initially allocated serials A181 to 205; the "A" class designation being applied to seaplanes. A short time later the Ministry changed the designations to R200 to R224; the "R" designation was used for reconnaissance aircraft. The shortage of fighter being overcome by the use of land-based Phoenix fighters and the new Micki defence flying boat, and the need was for reconnaissance seaplanes, the Brandenburg W.29 being able to be used in both roles. On 5 August 1918, the designation was changed again, this time to "C" class with serials C1 to C25. The "C" designation apparently referring to an armed single-engined two-seater.

The UFAG "C" class floatplane had only one machinegun mounted on the port side synchronised to fire through the propellor. The 185 hp Austro-Daimler six-cylinder engine was installed behind a large, angular, frontal radiator. Performance is quoted as being better than the German original.

Material shortages and unrest in Hungary contributed to delay in competing the order, and the first "C" type, C1, was not ready until October 1918. (1) A telegram to the War Ministry on 27 October 1918 reads: "Test flight with C1 on 25th October evening a success. Aircraft nose heavy otherwise good flight characteristics. Bad weather

is stopping further flights." C1 was the first and last W.29 in the old dual monarchy. At the time of the Armistice, at least 10 more W.29 floatplanes were nearly completed (serials C2 to C11) and the engines for the full 25 ordered had been delivered to UFAG.

Immediately after declaration of the Hungarian Soviet Republic in March 1919, all industries were nationalized by the government of Bela Kun. W.29 production was recommenced and possibly the remaining 24 aircraft were completed. Photographs show that at least three aircraft were completed. C1 is reported to have been used by the 9th Vizrepulo Szazad (Floatplane Squadron) under the command of Wollemann Istvan, together with some K class flying boats. The main preoccupation of the 9th was patrolling the Danube from Baja to Apati. The W.29 was used for ground strafing attacks. The final fate of the aircraft is not known.

(1) According to Peter Grosz's research in the Vienna War Archives, 25 W.29s were ordered from UFAG on 26 August 1918; the first three to be delivered by 31 October and the remainder by 31 December 1918.

Dimensions: Length 9.360 m, height 3.000 m, span 13,500 m; wing area 32.2 m<sup>2</sup>.

## Bibliography:

- Csanadi, Nagyvaradi and Winkler, "A Magyar Repules Tortente", Budapest 1977.
- Owers, "The Hansa Brandenburg Monoplanes: A Research Project" World War I Aeroplane, No. 61, Feb. 1977.
- Stach, "Osterreich-Ungarns Letztes Seeflugzeug: Die Hansa Brandenburg W.29 der UFAG", OFH Nachrichten, No. 2 1981.
- "Magyar Air Cover", Flying Review International, Sept. 1969.

Special thanks to P.M. Grosz, T. Goworek, and R. Stach who provided information and translation for this article. Thanks also the Oesterrichische Flugzug Historiker for permission to publish the translation and drawings.

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## BRIEFLY NOTED

Continued from page 70

captions. Available from Rare Aviation Publishers, Standargatan 9A, S-414 61 Goteborg, SWEDEN (\$6.00).

HIGH ADVENTURE by A.H. Cobby (108 pages) A reprint of the 1942 autobiography of Australia's leading WWI Ace. This high quality edition was produced to commemorate the Diamond Jubilee Year of the RAAF. It is the story of the author's experiences from basic flight training at Point Cook to dog fighting over France. The original book has been supplemented by over 100 well-chosen photos and ten color side-view painting executed in the usual excellent Kookaburra style. Available for \$22.95 plus 10% postage (post free to SAFCH members) from Kookaburra Technical Publications, 214 Kenmark Rd., Newark, DE 19713.

F-104G, HISTOIRE DU LOCKHEED STARFIGHTER EN SERVICE A L'OTAN by Robert Verhegghen (SAFCH #305). 40 pages including 80 photos (30 in color), color drawings of unit and special insignia, an excellent 1/72-scale drawing, and three color side-view drawings. Mostly on Dutch and Belgian F-104G's (including list of all Dutch and Belgian losses), but some good photos of the F-104 with other NATO countries. The color reproduction is absolutely outstanding. The text is in French with English photo

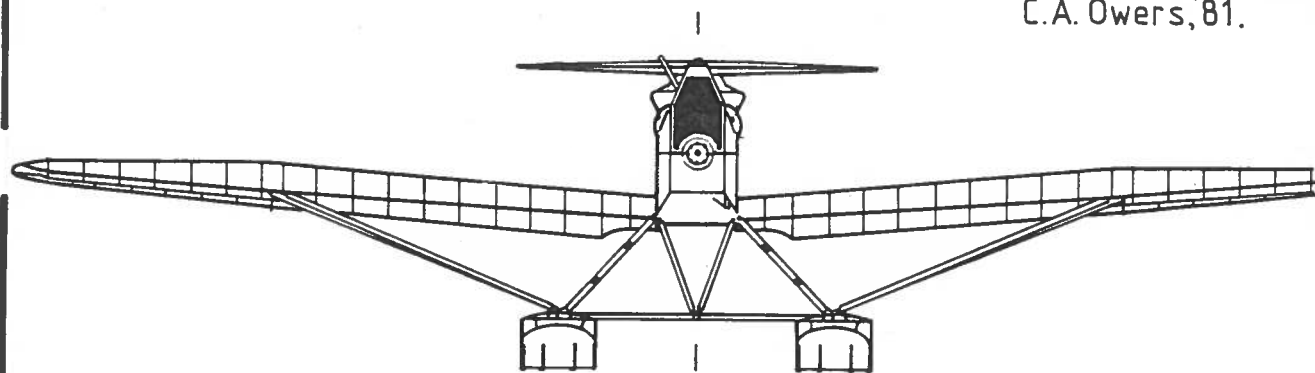
captions. Send IMO for \$6.00 (airmail postage included) to Editions 17, 17 Av. des Millepertuis, B-1070 Bruxelles, BELGIUM.

KPI MODELS, 1/72-scale vacuform models. All kits are molded in 0.040-inch plastic with clear canopies, 3-view drawings, and instructions.

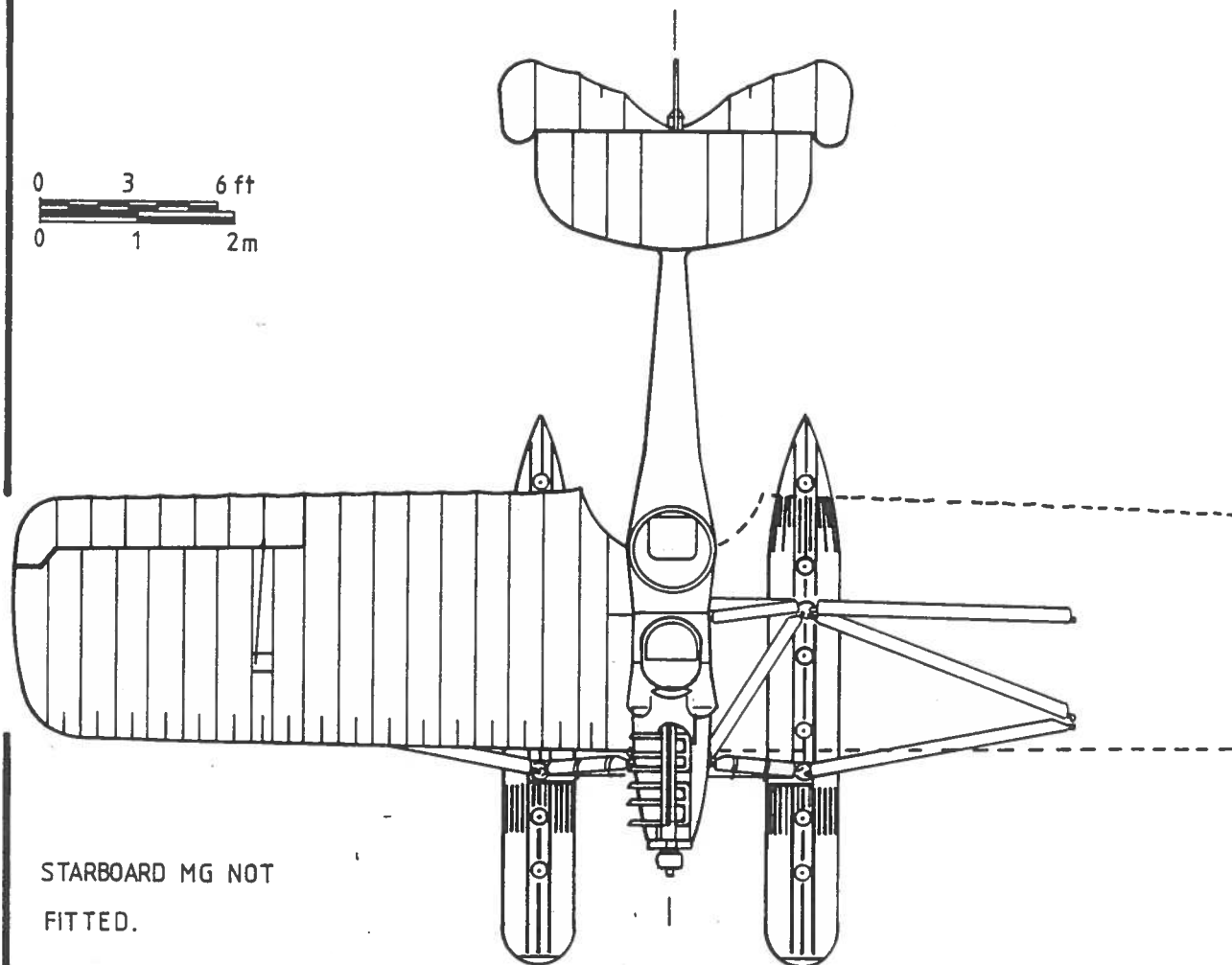
Kits available or scheduled for the near future are: Caproni Vizzola F.6M \$3.25, Campini Caproni N.1 \$4.00, PZL P.50 \$3.25, Breda 88 \$4.75, Polikarpov I-17 \$3.25, Lavochkin La-9 \$3.25, IMAM Ro. 57 \$3.75, Lavachkin La-11 \$3.25, Arsenal VG.33 \$3.25, Yak-4 \$4.25, Caproni Vizzola F.5 \$3.25, Myrsky II \$3.25, FFVS J.22 \$3.25, PZL P.37 \$6.00, Fiat Cansa FC.20 \$6.00, IL-4 (DB-3) \$6.50, Cant Z.1018 \$6.50; Oct. 81 MIG-7 \$3.25, SAI-403 \$3.25, SAI-207 \$3.25; Feb. 82 Ki-102 \$5.00, I-211/MiG-5 \$3.25; Apr 82 Ki-83 \$5.50; June 82 VL Pyorremsky \$3.25, Aichi B7A \$4.50; Oct 82 Nakajima B6N2 \$4.50, Koolhoven FK.58 \$3.25; Dec 82 Fokker D.23, Brewster Buccaneer \$4.00.

US Postpaid. Foreign add 70% for air mail or 50% for surface (excess refunded) Int. Money Order or US Currency. Ken LaSala (SAFCH #581), 703 Cannon Rd., Silver Springs, MD 20904.

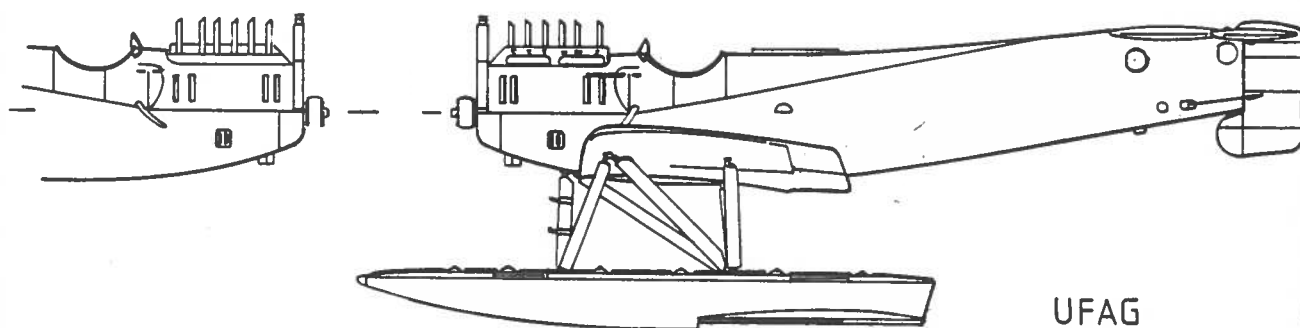
C.A. Owers, '81.



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UFAG  
BRANDENBURG W-29

# F-5 Update

This is the fourth update in our T-38/F-5 series. The abbreviations used are (AW) Aviation Week; (IAL) Interavia Air Letter; (FLT) Flight International.

**AUSTRIA:** The often promised yet often delayed Austrian order has finally been resolved in favor of the French Mirage 50. AW (20 July '81) has a lengthy article relating the many factors that went into forming that decision. This article also points out that since no contract has yet been signed, there is still the possibility of another change or delay!

**BRAZIL:** The Italian publication "Aviation and Marine" (April '80) carried a report of FAB F-5E exercises. Their in-flight refueling capability was demonstrated by refueling 24 F-5E during a single sortie by a single KC-130.

**CHILE:** A recent MIL AV News issue carries a good summary of the FACH equipment. An interesting point is that they plan to equip their F-5E/F fleet with the Israeli built SHAFRIR missile instead of the Sidewinder, according to the article.

**EL SALVADOR:** A mention in AW (2 March '81) indicates that a small F-5 sale might be considered by the U.S. However, no other information corroborating this has surfaced, so we can consider that it was speculation only.

**GREECE:** MIL AV News (July '80) carried a good summary of the HAF strength. They are credited with having 49 F-5A, eight RF-5A, and nine F-5B.

**IRAN:** Since the new regime has taken power in Iran, information on their F-5 operations has become obscure. However, a BBC television report claiming that Iraqi forces shot down an F-4 really showed what looked like the wreckage of an F-5. FLT (7 Feb. '81) reports that they are still keeping about 50 to 60 of their F-5 fleet operational, while other reports estimate that they have lost about 50 aircraft.

**INDONESIA:** Most sources agree that Indonesia is operating twelve F-5E and four F-5F.

**JORDAN:** MIL AV News (Aug. '79) credits the RJAF with 30 F-5A/RF-5A, eleven F-5B, 57 F-5E, and six F-5F. In the 1980-83 time frame, they are expected to phase-out their ageing F-5A and some of their F-5B aircraft.

**KENYA:** MIL AV News (Aug. '81) carries a good article on the KAF. They are credited with operating ten F-5E and two F-5F, with two more F-5F on order.

**KOREA (SOUTH):** Most sources agree that they will co-assemble their next series of F-5E/F. Thirty-six F-5E and thirty-two F-5F are involved. This will bring their inventory of F-5 aircraft up to 275, including all types.

**MALAYSIA:** It is generally agreed that Malaysia was operating two F-5B and fourteen F-5E aircraft. An additional order was placed for four F-5F to augment their trainer fleet and with that order an additional F-5E was ordered to make up a loss. In addition, Malaysia was the first country to order the new RF-5E, the full recce version of the F-5E. They will be getting two of the multi-sensor aircraft at a total cost of \$38.2 million.

**MEXICO:** The AW (2 March '81) report that Mexico has ordered ten F-5E and two F-5F is echoed by most other sources, including the "Northrop News" in their 24 April '81 issue.

**MOROCCO:** The RMAF has been operating Northrop aircraft for a good number of years, and currently their inventory is agreed to be about twenty F-5A/RF-5A and four F-5B, with some additional F-5A possibly transferred from Iran when Iran got their F-5E aircraft. From time to time, we hear reports that the Polisario guerrillas have shot down some of these F-5s, and the magazine "Events" (20 April '79) gives their total losses as seven. Most sources agree that they are getting sixteen F-5E and four F-5F.

**PAKISTAN:** This is an interesting case. There is a persistent series of reports (some in very reputable publications) that they are operating up to fifty F-5A/B aircraft, and Iran is mentioned as the source by the Italian magazine Aviation and Marine #72 (April '80). However, many other reports and compilations show no F-5 in their inventory at all, so this entire issue is in question.

**PORTUGAL:** MIL AV News (Aug. '81) states that they recently received a second batch of T-38A trainers in January '81. The article further speculates that they are still interested in some F-5E's (despite their recent A-7 purchase).

**SAUDI ARABIA:** MIL AV News (Oct. '79) has a very good article on the RSAF. Some of the interesting points brought out are that they have MAVERICK and SHRIKE missile capability and that their interceptor-dedicated airplanes might carry the French Matra MAGIC 550 in place of the Sidewinder.

**SINGAPORE:** Most sources agree that Singapore has twenty-one F-5E/F aircraft. Aerospace Daily (28 April '80) says that they will get six more F-5E which is backed up by an article to the same effect in the Northrop newsletter, "Northrop Update" (19 Sept. '80).

**SUDAN:** Most sources agree that Sudan got four F-5B from Saudi Arabia. In addition, the Los Angeles Times (12 Feb. '79) says that they will get twelve F-5s, but since no other source has picked this up, it is probable that the deal never went through.

**THAILAND:** Thailand is getting an additional four F-5E, according to Northrop's newsletter "Northrop Update" (9 Nov. '79). We have heard no more of the purported F-5A buy mentioned by Interavia (May '79), so it is reasonable to assume that F-5E was really what was meant.

**TURKEY:** FLT (15 Dec. '79) reported that they received an initial thirty ex USAF T-38A. These planes were delivered in six C-5A loads and they will gradually replace the Turkish T-33 currently being used. If any of our readers has any information on markings and insignia for these aircraft, we would be pleased to pass it on.

**U.S.A.:** AW (3 Sept. '79) had a report that the National Security Council were pressing the USAF to add four wings of F-5E in order to build up NATO strength in the air-to-air role. Nothing more has been heard of this so it is reasonable to presume that the suggestion was not acted upon.

FLT (15 April '79) carried an interesting piece on the RF-5E. This apparently is a major mod to the nose section to house a variety of cameras on pallets which can be pre-loaded and pre-set and quickly placed in the airplane as needed. This system is far more comprehensive than the former recce nose which could replace the F-5E radome. Additional photos and articles have appeared in AW (31 July '78) and (28 April '80) among others and the RF-5E prototype visited the 1979 Paris Air Show.

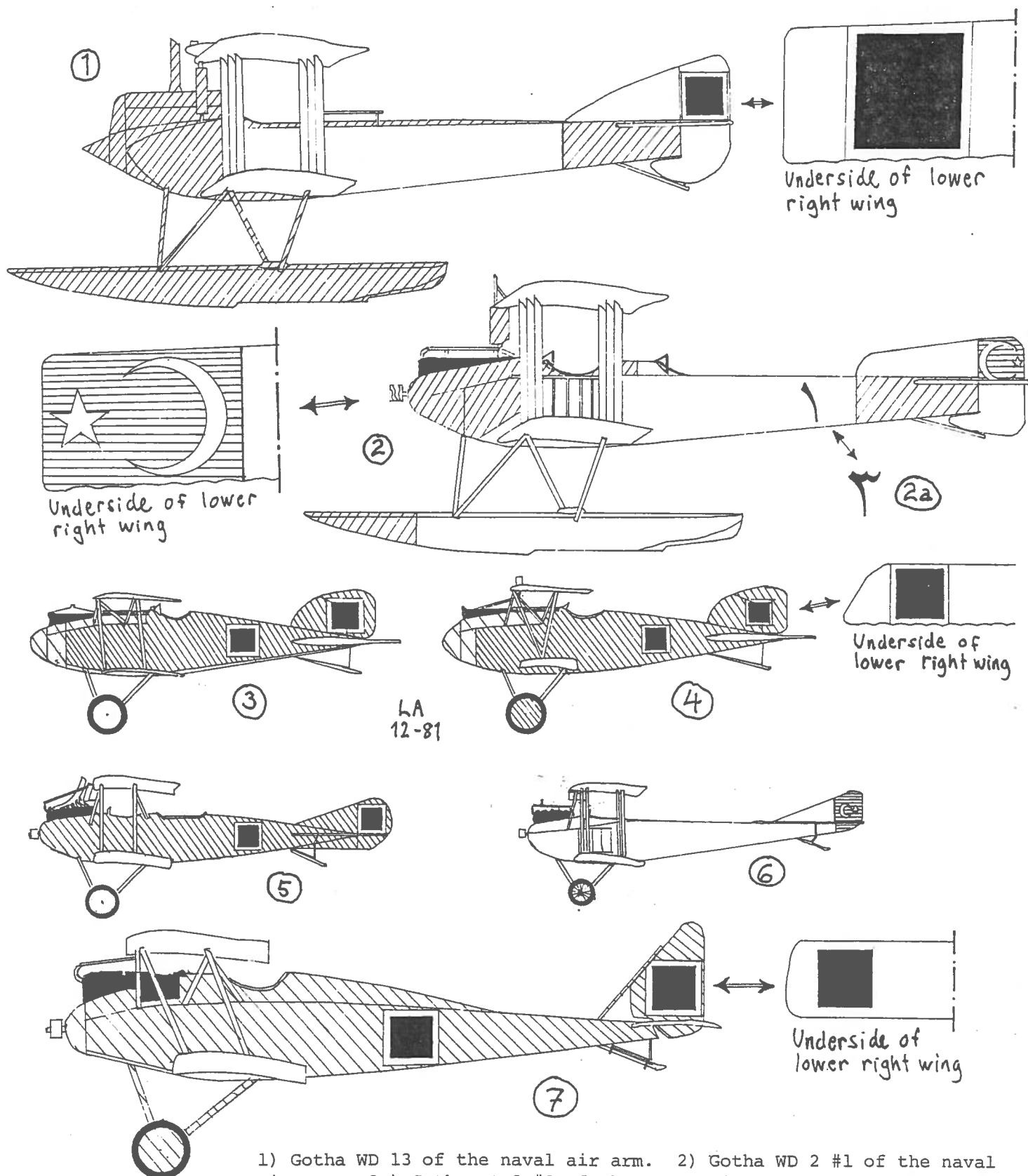
Considerable information has been released about Northrop's new airplane, the F-5G. A full size mock-up was shown at the Paris Air Show (1981). Apparently it is a single-engine version of the F-5E, utilizing a General Electric F404 engine.

As always, we welcome input and comments from the readers, and all material used will be credited.

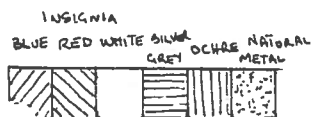
Gus Morfis (SAFCH #3), 4709 Greenmeadows Ave., Torrance, CA 90505.



# AIRCRAFT OF THE EARLY TURKISH AIR FORCE

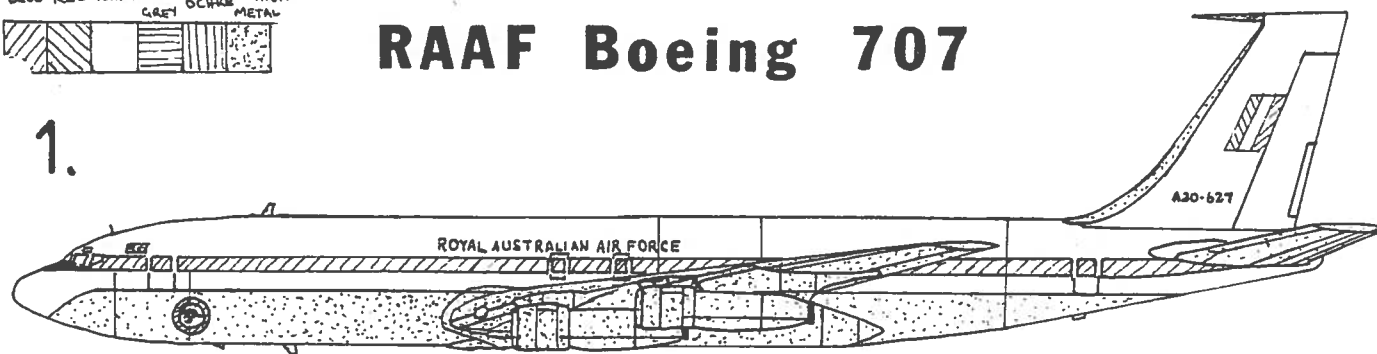


Lennart Andersson (SAFCH #68), Liljeg 9A, S-752 24 Uppsala, SWEDEN



# RAAF Boeing 707

1.



2.

N.B. - Fuselage windows omitted for clarity

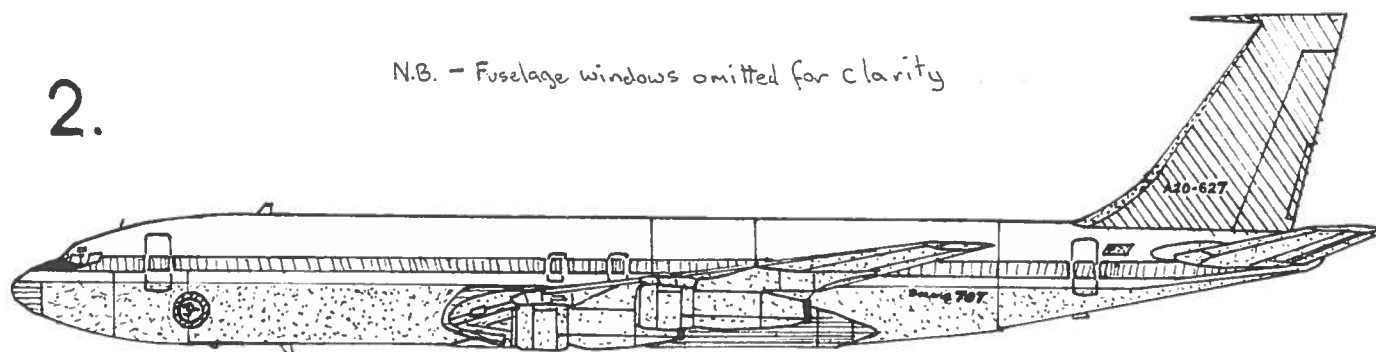


Fig. 1: A20-627, 37 Squadron, current scheme. White - upper fuselage and fin. Natural metal - lower fuselage, wings, tail planes; fin leading edge; engine nacelles; and pitot. Insignia blue - fuselage stripe, outlines to doors and emergency exits. Insignia red - "ROYAL AUSTRALIAN AIR FORCE". Black - anti-glare panel and serial number. N.B. Australian flag behind cockpit on both sides. A20-624 carries the same scheme except for the name "RICHMOND TOWN" in script below the cockpit. (See photo.)

Fig. 2: 7/4/79 - first military flight, standard QANTAS scheme. White - upper fuselage. Natural metal -

lower fuselage, wings, tail plane; fin leading edge; engine nacelles; and pitot. Silver grey - lower nose and wing root fairings. Ochre - fuselage stripe, outline around doors and emergency exits. Red - fin and rudder. Black - anti-glare panel, serial number, and "BOEING 707". N.B. Australian flag behind rear fuselage door - both sides.

Both aircraft have roundels in standard six positions.

References: Personal photos, RAAF Richmond PR, Australian Flying Magazine - various issues.

Compiled and drawn by Mike Mirkovic (SAFCH #465), 11/32 Curlew St., Bondi, N.S.W. 2026 Australia.

## Aircraft of the Spanish Civil War

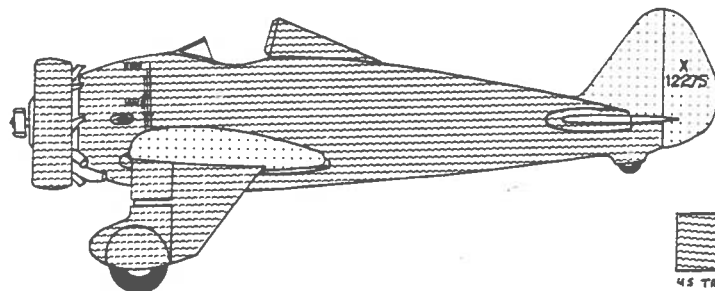
### Part Six - BOEING P-26

In SAFO #4, Ismael Garcia Llaca described the use of the one Boeing P-26 available to the Spanish Republican forces. However, at that time it was impossible to find any drawings or photographs of this machine. The following sketch is based on information from various sources and depicts the machine in the scheme at the time of its arrival in Spain. The writer feels that, unlike the drawing in L'Aviation Republicaine Espagnole, the wings and tail would be in yellow as shown. It is not known if

this machine was ever repainted in Republican markings during its short time in service. If anyone has further information on this aircraft, I would be very pleased to hear from them.

The finish show is US true blue on the fuselage, US orange yellow on the wings and tail. The code, in black, reads "X12275".

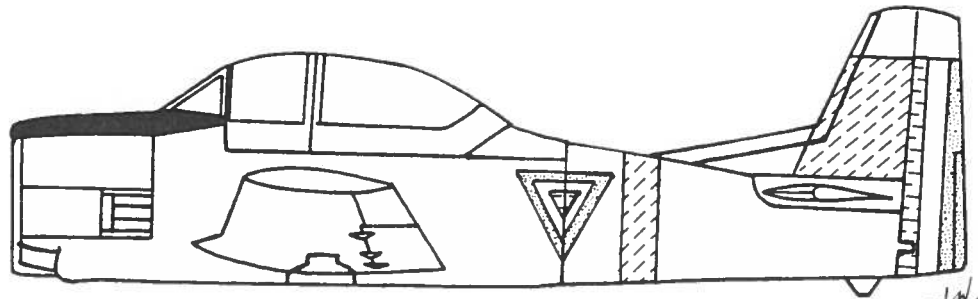
Bob Massey (SAFCH #364), 108 Worrall Ave., Arnold, Nottingham, ENGLAND.



*Bob Massey*

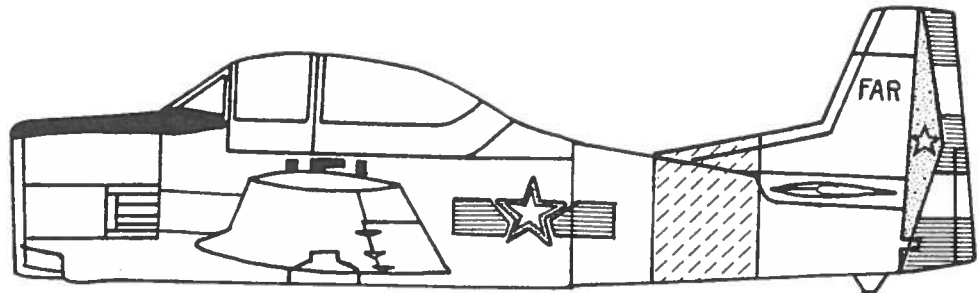
# LATIN T-28 TROJANS

T-28 A, MEXICO



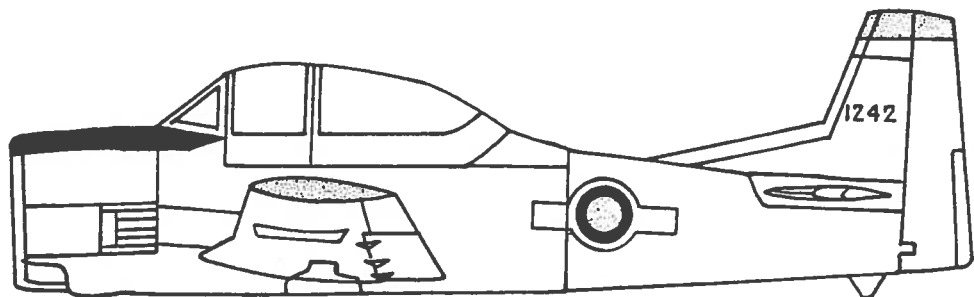
AIRCRAFT IS BARE METAL OVERALL. INSIGNIA IN SIX POSITIONS.

T-28 A, CUBA



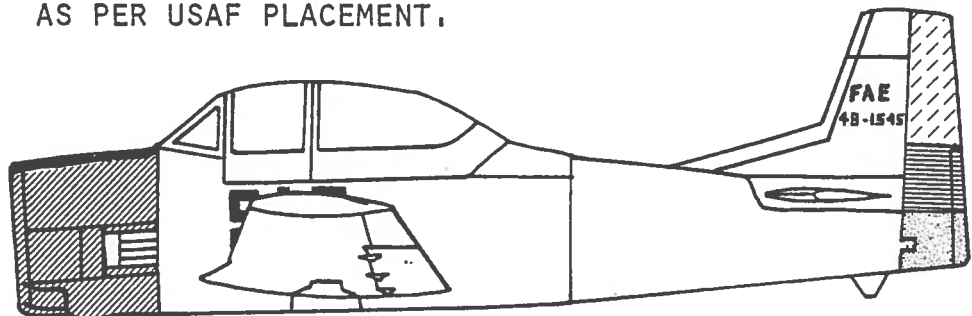
AIRCRAFT APPEARS LT GREY OVERALL. NO INFORMATION ON WING MARKINGS.

T-28D, HAITI



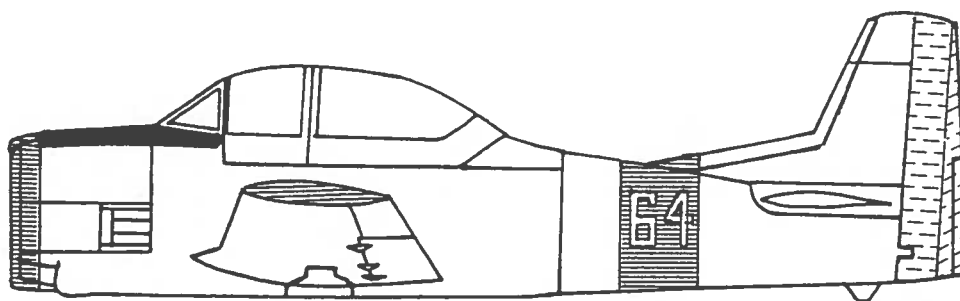
AIRCRAFT APPEARS BARE METAL OVERALL. WING MARKINGS AS PER USAF PLACEMENT.

T-28A, ECUADOR



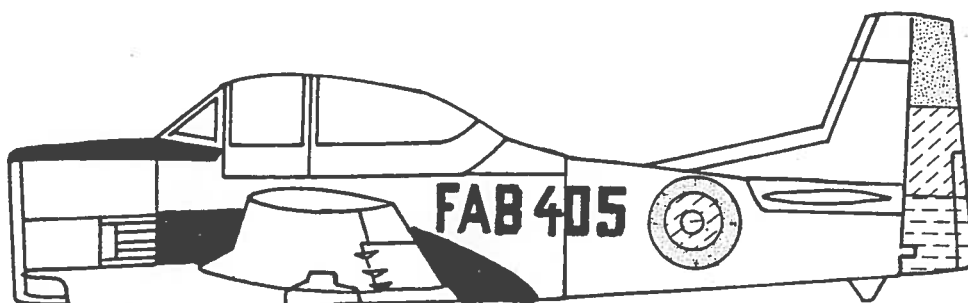
AIRCRAFT APPEARS LT GREY OVERALL.

T-28 FENNIC  
BRA ZIL



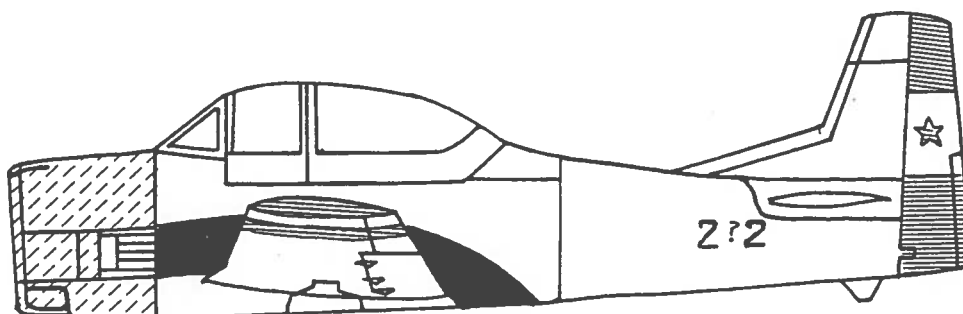
AIRCRAFT IS YELLOW GOLD OVERALL, BUMPER IS WHITE, INSIGNIA IN FOUR POSITIONS, FAB APPEARS UNDER RIGHT WING,

T-28D  
BOLIVIA



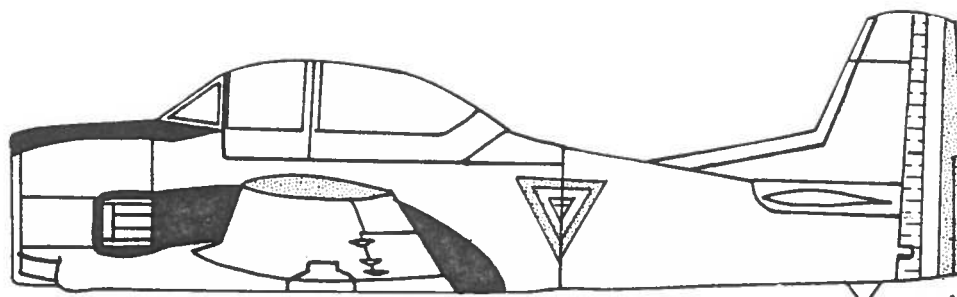
AIRCRAFT APPEARS BARE METAL OVERALL, INSIGNIA AS PER USAF,

T-28E, HONDURAS



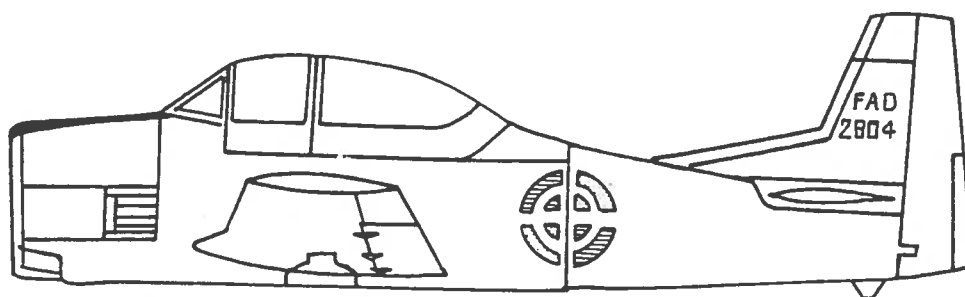
AIRCRAFT APPEARS LT GREY OVERALL, SERIAL NUMBER IS 2?2, UNREADABLE IN PHOTO I HAVE

T-28 A MEXICO



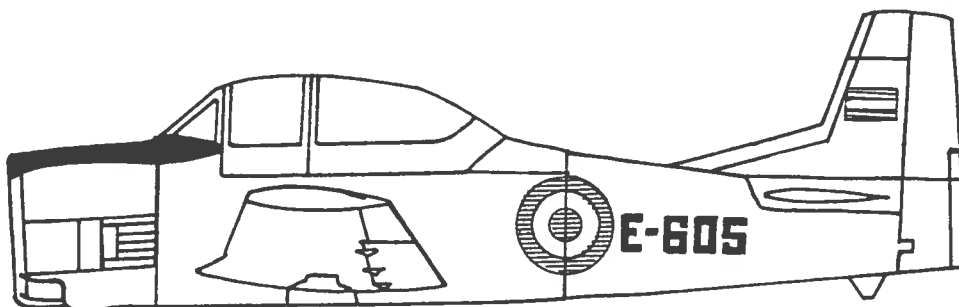
AIRCRAFT APPEARS BARE METAL OVERALL, INSIGNIA IN SIX POSITIONS,

T-28 FENNEC  
DOMINICAN REPUBLIC



AIRCRAFT APPEARS BARE METAL OVERALL, WING INSIGNIA AS PER USAF PLACEMENT, NOTE NO RUDDER STRIPPING.

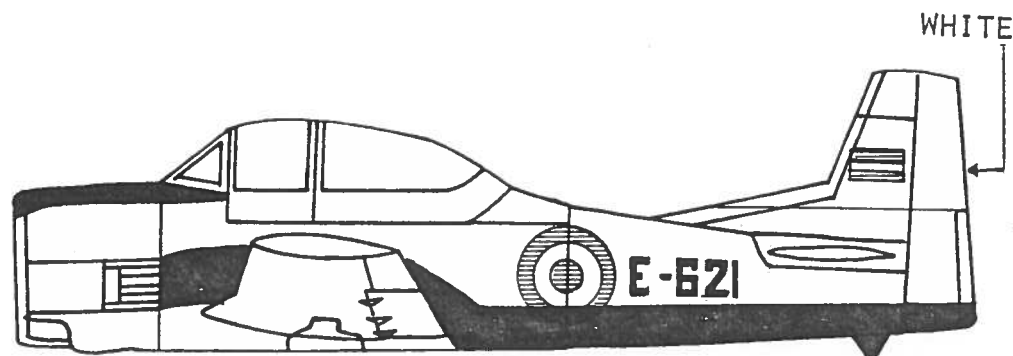
T-28 FENNEC  
ARGENTINA



AIRCRAFT APPEARS BARE METAL OVERALL.

T-28 FENNEC  
ARGENTINA

WHITE  
COWL



AIRCRAFT APPEARS BARE METAL OVERALL, INSIGNIA AS PER USAF PLACEMENT WITH AIRCRAFT NUMBER ON OPPOSITE WING.



YELLOW



INTERNATIONAL ORANGE



GREEN



BLACK

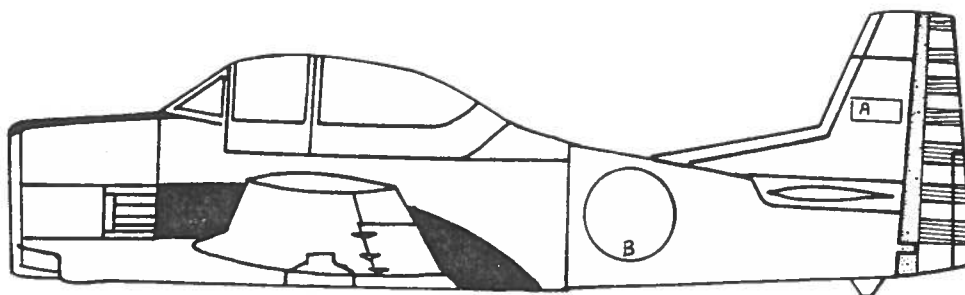


RED



BLUE (FOR ARGENTINA, HONDURAS, LT BLUE)

T-28D  
NICARAGUA



AIRCRAFT APPEARS BARE METAL OVERALL, A: INDICATES POSITION OF SERIAL, UNREADABLE ON SLIDE I HAVE, B: INDICATES POSITION OF FUSELAGE MARKINGS, WING MARKINGS CARRIED IN 4 POSITIONS



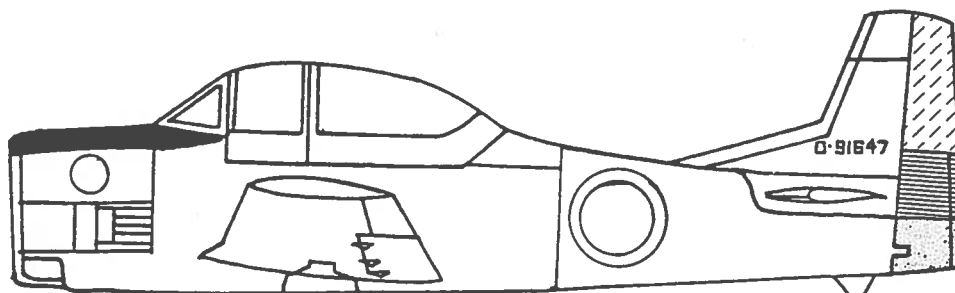
WING MARKINGS FOR NICARAGUA



RED  
BLUE

NICARAGUA IS IN WHITE, WINGS IN GOLD  
FUSELAGE MARKING FOR NICARAGUA

T-28A ECUADOR



AIRCRAFT APPEARS LT GREY OVERALL.

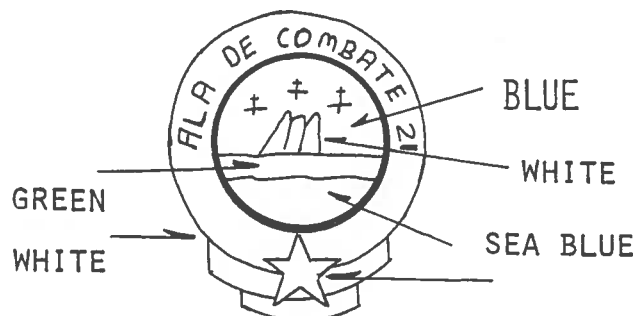


WHITE

GREEN WITH LT GREEN  
SHADING,

BLUE

DRAGONS TONGUE IS RED, AREA AROUND 2112 IS  
YELLOW,  
ECUADOR SQUADRON MARKING CARRIED ON NOSE.



BLUE

WHITE

SEA BLUE

ECUADOR REAR FUSELAGE MARKING